Clinical Management of Centrally Acting Monoamine and/or Thiol Deficiency Conference

The foundation of this conference is 22 peer-reviewed papers authored by the lecturers.

Course Directors:
Marty Hinz, MD
Stephen Center, MD
Ross Stewart, PhD

Earn up to 15 hours of CME!

Los Angeles Hilton Long Beach - 701 W Ocean Blvd
Long Beach, CA 90831

Friday April 27, 2018 (9am) - Sunday April 29, 2018 (Noon)
Register Now! Call: 877-626-2220
or register online @ www.NeuroSupport.com

Physicians: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of AKH Inc., Advancing Knowledge in Healthcare and NeuroResearch Centers, Inc. AKH Inc., Advancing Knowledge in Healthcare is accredited by the ACCME to provide continuing medical education for physicians.

AKH Inc., Advancing Knowledge in Healthcare designates this live activity for a maximum of 15 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit.
THE ROOTS OF THIS RESEARCH

In the early 1990s, union members in Duluth, MN demanded the benefit of medical insurance coverage for obesity treatment. With this, Duluth became the only community in the United States where treatment of obesity (BMI >30 with no other risk factors), was viewed as a medical risk factor and covered by insurance, to include Blue Cross. By 1994, the Morgan Park Medical Clinic was the only clinic-based medical weight loss program reimbursed by all commercial medical insurances in the United States. The other Duluth program we worked closely with, was hospital based.

The Morgan Park Clinic operated as a general medical clinic where obesity was treated just like any other risk. It was common to simultaneously see diverse patients such as a weight patient, a cast removal, and a chest pain that needed stabilization and transfer to the local hospital. After each patient visit, we databased everything possible. Not being hindered by the patient’s financial resources, generated a treasure trove of observations and data not possible with any other approach.

THIS CONFERENCE

It has been 20 years since treatment of obesity, and other diseases were unified. Success is more than writing a prescription. Patient support and positioning is critical.

Even if you don’t treat obesity as a risk factor, the techniques taught in this conference are appropriate for all patients suffering from disease relating to serotonin, catecholamines, and thiols deficiencies.

While there is a Saturday segment of the conference dedicated to the management of obesity and associated illnesses, the primary focus of this conference is not exclusively dedicated to obesity or a specific disease. It is dedicated to techniques related to serotonin, dopamine, norepinephrine, epinephrine, and thiol optimization as documented in the peer-reviewed medical literature.

SEROTONIN, DOPAMINE, NOREPINEPHRINE, AND/OR EPINEPHRINE DEFICIENCIES

This conference is based on data from over 2,000 clinics. The research to be presented is based on statistical analysis of:

- The Other disease database, consisting of 4 million+ patient-days of care
- The Parkinson’s disease database, consisting of data from over 1,450 patients
- The Neurotransmitter lab database, consisting of 2.5 million+ patient-days of care
- The Weight Loss database, consisting of 3 million+ patient days of care.

Upon hearing of these databases, the University of Minnesota Medical School in Duluth, Minnesota entered into an agreement to co-author research results. Since then, 22 peer-reviewed papers that have been published will be presented.

The scope and complexity of these databases cannot be overstated. It is envisioned that these databases and their statistical analysis will be generating peer-reviewed research data for many years to come.

“SUCCESS IS MORE THAN WRITING A PRESCRIPTION.”
Even if you are not currently treating Parkinson’s disease patients, everyone should be aware of the following. Parkinson’s disease is a prototypical disease for the study of all dopamine (catecholamine) related problems. While other dopamine diseases may have some of the problems associated with dopamine management, Parkinson’s disease has them all.

The most effective Parkinson’s treatment is the drug L-dopa, which crosses the blood-brain barrier then is freely metabolized to dopamine without biochemical feedback regulation. 89% of Parkinson’s disease patients take the drug combination L-dopa/carbidopa.

Chronic administration of the drug L-dopa may cause depletion of serotonin and all seven thiols. Speakers at this conference will present peer-reviewed papers documenting how the standard approach of administering L-dopa/carbidopa has been linked to 29 systemic depletions which affect hundreds of enzymes and proteins. Peer-reviewed strategies for depletion identification and management will be presented.

At some point in the history of medicine, a caregiver has prescribed reuptake inhibitors for each of these diseases. The initial problem we encountered was anorectic (norepinephrine reuptake inhibitor) drugs that quit working soon into treatment. Eventually, we found solutions that applied to all reuptake inhibitors.

Many diseases listed in the yellow area to the right are not exclusively caused by serotonin dysfunction or dopamine dysfunction. This conference will teach strategies for clinically differentiating serotonin dysfunction from dopamine (catecholamine) dysfunction to facilitate optimal initiation of care.

The speakers will present their papers discussing how depletion of serotonin and/or dopamine has been linked to the following and comprehensively review the known options available for effective management of each:

1. Low efficacy
2. Placebo relapse
3. Suicidal ideation
4. Symptom relapse
5. Discontinuation syndrome
6. Drug tachyphylaxis in general

### Serotonin and/or catecholamine deficiency associated or induced conditions (partial list)

<table>
<thead>
<tr>
<th>OBESITY</th>
<th>TYPE II DIABETES</th>
<th>HYPERCHOLESTEROLEMIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased life expectancy</td>
<td>Decreased life expectancy</td>
<td>Decreased life expectancy</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Increased incidence stroke</td>
<td>Heart disease</td>
</tr>
<tr>
<td>Knee problems</td>
<td>Increased infections</td>
<td>Stroke</td>
</tr>
<tr>
<td>Back problems</td>
<td>Diabetic neuropathy</td>
<td>Kidney failure</td>
</tr>
<tr>
<td>Increased rehabilitation time</td>
<td>Foot ulcers</td>
<td>Macular degeneration</td>
</tr>
<tr>
<td>Female fertility problems</td>
<td>Therapeutic amputations</td>
<td>Heart disease</td>
</tr>
<tr>
<td>Gynecologic irregularities</td>
<td>Disability</td>
<td>Increased incidence of stroke</td>
</tr>
<tr>
<td>Gout arthritis</td>
<td></td>
<td>Impotence</td>
</tr>
<tr>
<td>High blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cholesterol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased lung infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in gastric ulcers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myoclonus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ALL the problems listed above are caused by or exacerbated by eating too much food (obesity).

The only way to lose significant weight is to eat less food, thereby decreasing calorie intake. Serotonin and norepinephrine control the appetite center of the brain. The only drugs which control appetite and allow the patient to eat less food comfortably are the anorectic class of drugs in pharmacology. All of these drugs are serotonin and/or norepinephrine reuptake inhibitors.

![Additional Diseases Table](attachment:image.png)
OBJECTIVES:

The participant will be able to cite why the drug L-dopa is the most effective Parkinson’s disease treatment.

The participant will be able to describe carbidopa’s mechanism of action and its potential impact on:
1. Worsening Parkinson symptoms
2. Parkinson death rate
3. L-dopa tachyphylaxis
4. Depletion of other systems
5. Dyskinesias and choreiform movement

The participant will be able to describe the published mechanism of action for Parkinson on/off effect.

The participant will be able to describe functional status determination of the Organic Cation Transporters Type-2.

The participant will be able to understand the process used to determine optimal appetite suppression efficacy in medical weight loss.

The participant will be able to cite optimal positioning for each of the following in medical weight loss.
1. Patient motivation enhancement
2. Impact of time between office visits
3. Calorie intake optimization
4. Appetite control (suppression)
5. Computers in weight loss
6. Managing diseases affected by weight loss

INTENDED AUDIENCE: Physicians, psychiatrists, clinical psychologists, gastroenterologists, naturopaths, nurse practitioners, physician assistants and other healthcare providers licensed to manage patient problems relating to serotonin, dopamine, norepinephrine, epinephrine and/or thiols.

CLINICAL MANAGEMENT OF CENTRALLY ACTING MONOAMINE AND/OR THIOL DEFICIENCY CONFERENCE

Hilton Long Beach, CA
701 W Ocean Blvd
Long Beach, CA 90831

Registration Fee:

<table>
<thead>
<tr>
<th></th>
<th>Prior to Mar. 1st</th>
<th>After Feb. 28th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Rate</td>
<td>$399</td>
<td>$599</td>
</tr>
<tr>
<td>Previously Attended a NeuroResearch Conference</td>
<td>$199</td>
<td>$399</td>
</tr>
<tr>
<td>Pay at the door:</td>
<td>$625 for all</td>
<td></td>
</tr>
</tbody>
</table>

Note: The registration fee covers the attendee and one guest. Medical education credit for the guest will cost an additional $200.

FOR MORE INFORMATION OR TO REGISTER, CALL NEURORESEARCH AT 877-626-2220

WWW.NEUROSUPPORT.COM

Physicians: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of AKH Inc., Advancing Knowledge in Healthcare and NeuroResearch Centers, Inc. AKH Inc., Advancing Knowledge in Healthcare is accredited by the ACCME to provide continuing medical education for physicians.

AKH Inc., Advancing Knowledge in Healthcare designates this live activity for a maximum of 15 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Physician Assistants: NCCPA accepts AMA PRA Category 1 Credit™ from organizations accredited by ACCME.

Commercial Support: Full notification of commercial support will be provided in the final program.

Criteria for Success: Statements of credit will be awarded based on the participant’s attendance and submission of the activity evaluation form. A statement of credit will be available upon completion of an online evaluation/claimed credit form at http://akhcme.com/akhcme/pages/neuroresearch. You must participate in the entire activity to receive credit. If you have questions about this CME activity, please contact AKH Inc. at tbrigoni@akhcme.com.