Infectious Disease Overview

If your schedule won’t allow you to stay for the whole meeting, maximize your time in Los Angeles and get the most out of a shorter trip with this Neuroinfectious Disease specialty track, with core programming taking place Wednesday to Friday. Look for education and science covering the full spectrum neuroinfectious disease topics, including differential diagnosis, treatment and management, diagnostic testing, and emergencies.

Monday, April 23  
3:30 p.m.–5:30 p.m.  
C95  Spanish Symposium: Update on CNS Infections and Tropical Medicine

Wednesday, April 25  
7:00 a.m.–9:00 a.m.  
C134  Tuberculosis of the Central Nervous System  
1:00 p.m.–3:00 p.m.  
C144  Neurology Update I: Epilepsy, Behavioral Neurology, and Neurologic Infections

Thursday, April 26  
7:00 a.m.–9:00 a.m.  
C177  So You’ve Diagnosed Your Patient with a Neuroinfectious Disease, Now What? Practical Pearls in the Treatment and Management of Neuroinfectious Diseases

Program Description:
Infectious diseases of the central nervous system affect millions of people in tropical areas, where most of these conditions are linked to poverty and underdevelopment. In addition, increased tourism and immigration have turned some formerly geographically restricted infections into widespread conditions. Parasites and viruses are top ranked among infectious diseases in the tropics. In addition, tropical neurology is not confined to infections, since other conditions such as nutritional and toxic disorders, as well as bites from snakes and other poisonous animals represent significant causes of disease in rural areas of these regions. Infections and other tropical diseases of the nervous system cause pleomorphic and nonspecific clinical syndromes, including seizure disorders, subacute or chronic meningitis, acute or subacute encephalitis, space-occupying brain lesions, stroke, and myelopathy. In this course we will review the most common tropical diseases in the tropics. This program will be presented in Spanish.

Upon Completion:
Participants should be able to recognize and treat the most common infections and other diseases affecting the nervous system in tropical areas.

Lecture/Faculty:
- Neuroviruses Emerging in the Americas Study (NEAS)
  Carlos A. Pardo-Villamizar, MD, Baltimore, MD
- Advances in the Diagnosis and Treatment of Neurocysticercosis
  Oscar H. Del Brutto, MD, FAAN, Miami, FL
- Nutritional Diseases of the Nervous System in the Tropics
  Gustavo C. Roman, MD, FAAN, Houston, TX
- Case Discussions
  Oscar H. Del Brutto, MD, FAAN, Miami, FL  
  Daniel Ontaneda, MD, Cleveland, OH
  Carlos A. Pardo-Villamizar, MD, Baltimore, MD
  Gustavo C. Roman, MD, FAAN, Houston, TX

Core Competencies:  Medical Knowledge

Teaching Style:  Didactic, Audience Participation, Case-Based

CME Credits:  2

Recommended Audience:  General Neurologist, Neurohospitalist, Specialist Neurologist, Trainee
Infectious Disease

**Program Descriptions**

### Course
**Wednesday, April 25, 2018** 7:00 a.m.–9:00 a.m.

<table>
<thead>
<tr>
<th>C134</th>
<th>Tuberculosis of the Central Nervous System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:</td>
<td>Infectious Disease; Global Health</td>
</tr>
<tr>
<td>Director:</td>
<td>Jerome H. Chin, MD, PhD, MPH, FAAN, New York, NY</td>
</tr>
</tbody>
</table>

**Program Description:**
Tuberculosis is the leading infectious cause of death in the world with cases reported in every region. Central nervous system tuberculosis, including meningitis, tuberculomas, and vertebral involvement, carries the highest morbidity and mortality. With increasing global migration and travel, neurologists in all countries need to be prepared to diagnosis and treat tuberculosis. The faculty will discuss the current guidelines and recent advances in the diagnosis and treatment of central nervous system tuberculosis. Case presentations will be used to provide practical guidance.

**Upon Completion:**
Participants should be familiar with the different clinical presentations of central nervous system tuberculosis, understand the advantages and limitations of diagnostic studies, and be able to make a diagnosis using available clinical, laboratory, and imaging findings.

**Lecture/Faculty:**
- Global and Regional Epidemiology of Tuberculosis
  - Jaydeep M. Bhatt, MD, New York, NY
- Challenges and Developments in the Diagnosis of Tuberculous Meningitis
  - Omar Siddiqi, MD, Lusaka, Zambia
- Case Presentations and Tuberculosis Treatment Guidelines
  - Jerome H. Chin, MD, PhD, MPH, FAAN, New York, NY

**Core Competencies:**
- Patient Care
- Medical Knowledge

**Teaching Style:**
- Didactic, Case-Based

**CME Credits:**
- 2

**Recommended Audience:**
- Non-Neurologist, Specialist Neurologist, Trainee, Neurohospitalist, Advanced Practice Provider, General Neurologist

### Course
**Wednesday, April 25, 2018** 1:00 p.m.–3:00 p.m.

<table>
<thead>
<tr>
<th>C144</th>
<th>Neurology Update I: Epilepsy, Behavioral Neurology, and Neurologic Infections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:</td>
<td>General Neurology; Epilepsy/Clinical Neurophysiology (EEG); Aging, Dementia, Cognitive, and Behavioral Neurology; Infectious Disease</td>
</tr>
<tr>
<td>Director:</td>
<td>Ralph F. Józefowicz, MD, FAAN, Rochester, NY</td>
</tr>
</tbody>
</table>

See complete course description on page 82 »

### Course
**Thursday, April 26, 2018** 7:00 a.m.–9:00 a.m.

<table>
<thead>
<tr>
<th>C177</th>
<th>So You’ve Diagnosed Your Patient with a Neuroinfectious Disease, Now What? Practical Pearls in the Treatment and Management of Neuroinfectious Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic:</td>
<td>Infectious Disease</td>
</tr>
<tr>
<td>Director:</td>
<td>Felicia Chow, MD, San Francisco, CA</td>
</tr>
</tbody>
</table>

**Program Description:**
This case-based interactive course will focus on the management of patients with infections of the nervous system and associated neurological complications. An interdisciplinary panel of experts from both neurology and infectious diseases will share their approach to challenging neuroinfectious diseases cases. An emphasis will be placed on an up-to-date, evidence-based approach to complicated cases combined with on-the-ground experience from clinical experts in the field.

**Upon Completion:**
Participants will have increased familiarity and confidence with the evaluation and management of neuroinfectious diseases, including selection of antimicrobial therapy; CNS penetration and neurological toxicities of antimicrobial therapy; timing and duration of corticosteroid therapy for neurological infections; management of common complications of CNS infections (e.g., increased intracranial pressure, hyponatremia, vasculitis); utility of laboratories for monitoring response to therapy.

**Lecture/Faculty:**
- Case One
  - Usha K. Misra, MD, FAAN, Lucknow, India
- Case Two
  - David Koelle, MD, Seattle, WA
  - Maria A. Nagel, MD, Aurora, CO

**Core Competencies:**
- Interpersonal and Communication Skills
- Medical Knowledge
- Patient Care
- Practice-Based Learning and Improvement
### Course

**Course**

**S40  Infectious Disease Platform Session**

**Thursday, April 26, 2018  1:00 p.m.–3:00 p.m.**

<table>
<thead>
<tr>
<th>Topic:</th>
<th>Infectious Disease</th>
</tr>
</thead>
</table>

| **C218  Infections of the Nervous System I: Diagnostic Testing of Neurological Infections** |
|--------|---------------------------------------------------------------|
| **Director:** Tracey Cho, MD, FAAN, Boston, MA |
| **Topic:** Infectious Disease |

#### Program Description:

This program will provide an overview of the laboratory and imaging studies available for timely and accurate diagnosis of a range of infections of the nervous system. Faculty will provide updates on the appropriate use of currently available tests, including sensitivity and specificity, as well as comment on emerging diagnostic modalities. Case discussions with audience questions will be encouraged.

*This program complements C226: Infections of the Nervous System II: Neuro-ID Emergencies and C239: Infections of the Nervous System III: Advanced Topics in Infectious Neurology, but covers independent topics.*

#### Upon Completion:

Participants should be able to effectively order and interpret laboratory and imaging studies for timely and accurate diagnosis of infections of the nervous system.

#### Lecture/Faculty:

- **Diagnostic Laboratory Testing for CNS Infections**
  - Michael R. Wilson, MD, San Francisco, CA
- **Diagnostic Imaging for CNS Infections**
  - Tracey Cho, MD, FAAN, Boston, MA

#### Core Competencies:

- Medical Knowledge, Patient Care

#### Teaching Style:

- Case-Based, Didactic, Interactive

#### CME Credits:

- 2

#### Recommended Audience:

- Trainee, General Neurologist, Specialist Neurologist

---

**Course**

**C201  Differential Diagnosis of Neurologic Infections**

**Thursday, April 26, 2018  3:30 p.m.–5:30 p.m.**

<table>
<thead>
<tr>
<th>Topic:</th>
<th>Infectious Disease</th>
</tr>
</thead>
</table>

| **Director:** Marie Francisca Grill, MD, Scottsdale, AZ |

#### Program Description:

Differential diagnosis of patients with possible neurologic infections will be presented to discuss diagnostic considerations, imaging, cerebrospinal fluid interpretation, PCR testing and other microbiologic tests, as well as mimicking disorders. Specific topics will include cases highlighting coverage of encephalitis, meningitis, and myelitis.

#### Upon Completion:

Participants should be able to improve their ability to form a more precise differential diagnosis of possible neurologic infections, and to recognize specific laboratory tests and imaging findings that can guide the differential diagnosis accordingly.

#### Lecture/Faculty:

- **Encephalitis**
  - Avindra Nath, MD, MBBS, FAAN, Bethesda, MD
- **Chronic Meningitis**
  - Israel Steiner, MD, Petah Tiqva, Israel
- **Myelopathies**
  - Marie Francisca Grill, MD, Scottsdale, AZ

#### Core Competencies:

- Medical Knowledge, Patient Care

#### Teaching Style:

- Audience Participation, Case-Based, Interactive

#### CME Credits:

- 2

#### Recommended Audience:

- General Neurologist, Specialist Neurologist, Trainee
**Program Descriptions**

**Infectious Disease**

**C226  Infections of the Nervous System II: Neuro-ID Emergencies**

**Friday, April 27, 2018  1:00 p.m.–3:00 p.m.**

**Topic:** Infectious Disease  
**Director:** Tracey Cho, MD, FAAN, Boston, MA

**Program Description:**
Infections of the nervous system can present acutely and cause permanent neurologic disability or death. Prompt diagnosis and appropriate treatment can mitigate the morbidity and mortality of acute CNS infections. Faculty will focus on acute meningitis and encephalitis, with an emphasis on diagnosis and management of these relatively common infectious syndromes. Syndromic approach to diagnosis and case discussions with audience questions will be encouraged.

This program complements C218: Infections of the Nervous System I: Diagnostic Testing of Neurological Infections and C239: Infections of the Nervous System III: Advanced Topics in Infectious Neurology, but covers independent topics.

**Upon Completion:**
Participants should be able to recognize, differentiate, and manage common acute infections of the nervous system.

**Lecture/Faculty:**
- Meningitis  
  Christina Marra, MD, FAAN, Seattle, WA
- Acute Encephalitis: From Infections to Autoimmunity  
  Arun Venkatesan, MD, PhD, Baltimore, MD

**Core Competencies:** Medical Knowledge, Patient Care

**Teaching Style:** Case-Based, Didactic, Interactive

**CME Credits:** 2

**Recommended Audience:** Advanced Practice Provider, General Neurologist, Specialist Neurologist, Trainee

---

**C239  Infections of the Nervous System III: Advanced Topics in Infectious Neurology**

**Friday, April 27, 2018  3:30 p.m.–5:30 p.m.**

**Topic:** Infectious Disease  
**Director:** Tracey Cho, MD, FAAN, Boston, MA

**Program Description:**
This program will provide an overview of advanced topics in infections of the central nervous system. Faculty will provide updates on the appropriate approach to diagnosis and management of a neurological Lyme disease and infectious causes of stroke. Case discussions with audience questions will be encouraged.

This program complements C218: Infections of the Nervous System I: Diagnostic Testing of Neurological Infections and C226: Infections of the Nervous System II: Neuro-ID Emergencies, but covers independent topics.

**Upon Completion:**
Participants should be able to identify current diagnostic algorithms and treatment recommendations for a variety of advanced infections and infectious complications affecting the central nervous system.

**Lecture/Faculty:**
- Brain Abscess  
  Kelly Baldwin, MD, Danville, PA
- Neuro-HIV  
  Felicia Chow, MD, San Francisco, CA

**Core Competencies:** Medical Knowledge, Patient Care

**Teaching Style:** Case-Based, Didactic, Interactive

**CME Credits:** 2

**Recommended Audience:** Advanced Practice Provider, General Neurologist, Specialist Neurologist, Trainee