Course Title: Advanced Strabismus Diagnosis and Treatment
(1-hour workshop, as part of the 2017 Diplomate Preparation Course)

Presenters: Drs. Kelly Frantz and Christine Allison

Description:
Participants will perform procedures for diagnosis and treatment of strabismus during this 1-hour workshop. Techniques include those for monocular fixation, deviation magnitude and comitance, and correspondence, including Haidinger’s brushes, amblyoscope, Bagolini, and Hering-Bielschowsky afterimage test.

Learning Objectives:
1. The participant will be able to perform and interpret results of tests for eccentric fixation, and use the Haidinger’s brushes technique for vision therapy.
2. The participant will be able to perform and interpret results of tests for ocular deviation.
3. The participant will be able to perform and interpret results of tests for deviation comitance.
4. The participant will be able to perform and interpret results of tests for anomalous correspondence.
5. The participant will be able to use afterimages to monitor status of correspondence during vision therapy.
Outline:

I. Monocular Fixation
   A. Definition of eccentric fixation
   B. Diagnostic techniques
      1. Haidinger’s Brushes
      2. Visuoscopy
         a. Test performance
         b. Interpretation of results
   C. Treatment of eccentric fixation
      1. Haidinger’s brushes
      2. Fast-pointing

II. Measuring the ocular deviation
   A. Cover test – unilateral and alternating
   B. Hirschberg/Kappa/Krimsky test
      1. Test performance
      2. Interpretation of results
   C. Brückner test
1. Test performance
2. Interpretation of results

III. Deviation comitance (concomitance) versus noncomitance
   A. Alternating cover test in the diagnostic action fields
      1. Test performance
      2. Interpretation of results
     
   B. Maddox rod test
      1. Test performance
      2. Interpretation of results

   C. Parks 3-step test
      1. Test performance
      2. Interpretation of results

IV. Status of correspondence
   A. Types
      1. Normal
      2. Harmonious anomalous correspondence (HAC)
      3. Unharmonious anomalous correspondence (UAC)
      4. Paradoxical AC types I and II
      5. Covariation from AC to NC

   B. Testing
      1. Major amblyoscope (Synoptophore)
         a. Test performance
         b. Interpretation of results
      2. Bagolini striated lens test
         a. Test performance
         b. Interpretation of results
      3. Hering-Bielschowsky afterimage test
a. Test performance
b. Interpretation of results

4. Red lens test of correspondence
   a. Test performance
   b. Interpretation of results

C. Treatment of AC
   1. Use of crossed afterimages for monitoring status of correspondence
   2. Amblyoscope
      a. Flom swing method (motor stimulation)
      b. Sensory stimulation at angle of deviation