

## Anterior Segment Update

Jessica Heckman, OD

Chu Vision Institute

1. Cataract/Presbyopia Update
  - a. Lens exchange surgery
    - i. Cataract surgery
    - ii. Refractive lens exchange
  - b. Patient selection
    - i. Ocular health
    - ii. Patient lifestyle
    - iii. Reasonable expectations
  - c. Technology/IOL selection
    - i. Presbyopia correcting IOLs
      1. Accommodating IOL
        - a. Effectiveness data
        - b. Patient selection
        - c. Patient education
          - i. Visual expectations
      2. Multifocal IOLs
        - a. Effectiveness data
          - i. Variation in near point with various platforms and powers
          - ii. Lens profiles and defocus curves
        - b. Patient selection
        - c. Patient education
          - i. Visual expectations
      3. Extended depth of focus (EDOF)
        - a. Lens profile
        - b. Defocus curve data
        - c. Incidence of glare and halo
        - d. Patient selection
        - e. Patient education
          - i. Visual expectations
      4. Trifocal IOL
        - a. Newly FDA approved
        - b. Patient selection
        - c. Patient education
          - i. Visual expectations
2. Update of Anterior segment imaging
  - a. Pre-operative evaluation-maximize outcomes with appropriate pre operative management and patient selection
    - i. Diagnostic imaging
    - ii. IOL calculation

- iii. Topography
  - 1. Effect of irregular astigmatism
  - 2. Posterior astigmatism
- iv. Angle alpha
  - 1. Definition
  - 2. How affects IOL selection
- v. Retinal health
  - 1. OCT
- vi. Ocular surface
  - 1. Meibomography
  - 2. Ocular scatter index
  - 3. Tear break up time
  - 4. Pre-operative management
    - a. Medications
    - b. Plugs
    - c. Meibomian gland management
- 3. Update on post-operative care
  - a. New medications
    - i. Small molecule anti-inflammatory medications
    - ii. Mucus penetrating particles
    - iii. Compounded medications
    - iv. Injected/implanted medications
      - 1. Anterior chamber
      - 2. Punctal plug
  - b. Post-operative management of lens exchange patient
    - i. Ocular surface
    - ii. Media Opacity
    - iii. Secondary procedure
      - 1. YAG capsulotomy
      - 2. LVC enhancement
      - 3. Vitreolysis