

# **The Practical Application of Corneal Topography in Clinical Practice**

**One Hour**

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## **Image Capture Optimization**

- **Lids & Lashes**
- **Tear film stabilization**
- **Geometric capture (vs. Angle lambda)**
- **Avoiding maps with extrapolation error**

## **Analysis Options – Interpretation Options**

- **Axial**
- **Tangential**
- **Refractive**
- **Elevation**
- **Wavefront**

## **Anatomical Contributors to Contact Lens Parameters**

- **Apical radius**
- **Shape factors**
  - **Eccentricity**
  - **Shape factor**
  - **Asphericity**
- **Visible iris diameter**

## **Understanding Sagittal Depth**

- **Corneal Sag**
  - **Flat meridian**
  - **Steep meridian**
  - **Differentials and their contribution**
- **Scleral Sag Depth**
  - **Calculating peripheral corneal angle**

- **Determining scleral sag from corneal sag and angle**
- **Calculating the optimal sag scleral lens**
- **Case studies**

### **Topography Contact Lens Fitting Modules – Rotationally symmetric**

- **Building lenses by tear layer profile**
  - **Minimum threshold ( $\leq 20\mu\text{m}$ )**
  - **Bubble formation ( $\geq 90\mu\text{m}$ )**
- **Apical clearance**
- **Fulcrum of bearing**
- **Path of least resistance**
- **Case studies**

### **Calculating Asymmetrical Back Surfaces – Non-rotational symmetric**

- **Apical clearance**
- **Fulcrum of bearing**
- **Path of least resistance**
- **Case studies**

### **Subtractive Maps in Orthokeratology and Refractive Surgery**

- **Axial (astigmatism and corneal power)**
- **Tangential (lens/ablation position)**
- **Refractive (treatment zone size and position)**