

**Vision Expo West
September 28-30; Las Vegas, Nevada**

What's New & Sexy in Contacts?

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1 Hour
OD Education
Category: CL Lenses

Summary:

This course will provide an overview of the latest developments in contact lens innovations, materials, care systems, and designs. It will provide a brief glimpse of the contact lens practice of the future and the innovative products that practitioners may be utilizing in the not-too-distant future.

Learning Objectives

1. Be aware of recent updates in silicone hydrogel materials and designs.
2. Be aware of recent updates in daily disposable materials and designs.
3. Be updated on new options for patients with respect to specialty lenses, including myopia management, scleral, ortho-K and hybrid options.
4. Be updated on the future for contact lens materials as biosensors.

Outline

- 1) Introduction of speakers (**Lyndon**)
- 2) Recent updates in silicone hydrogel materials and designs (**Jason**)
 - a) Parameter Availability
 - b) Oxygen Permeability
 - c) Moisture Retention
 - d) Multifocal and Bifocal Designs
 - e) Customized Fits
- 3) Recent updates in daily disposable options (**Jason**)
 - a) Parameter Availability
 - b) Comfort and Performance
 - c) Safety and Risk Reduction
 - d) Therapeutic Uses
- 4) Recent updates in myopia management contact lenses (**Sheila**)
 - a) Lens options available
 - i) Soft daily
 - ii) Soft Monthly
 - iii) Custom Soft
 - iv) Hybrid
 - v) Orthokeratology
 - vi) Scleral
 - b) Recent results
 - i) New literature
 - ii) Novel case study
- 5) Recent updates for specialty lenses (**Sheila**)
 - a) Scleral updates
 - i) Scleral shape studies
 - ii) Scleral + conjunctival tools mapping overview
 - (1) OCT
 - (2) Scleral Mapping
 - (3) Corneoscleral Molding

- iii) Wavefront guided lens design
 - (1) HOA correction
 - (2) Multifocals
- iv) Advanced lens shape modifications
- v) Artificial intelligence
- vi) Medication delivery
- b) Ortho-K updates
 - i) Digital empirical design lens software
 - ii) Profilometry driven fitting
 - iii) Smaller treatment zone
- c) Hybrid updates
 - i) Reverse curve designs
 - ii) EDOF Multifocals
- 6) Updates on potential future uses of contact lenses (**Lyndon**)
 - a) Smart contact lens requirements
 - b) Systemic disease detection
 - i) Systemic disease biomarkers
 - c) Ocular disease detection
 - i) Glaucoma
 - ii) Dry eye
 - iii) Ocular surface inflammation
 - d) Treatment of ocular disease via drug delivery
 - i) Basic concepts
 - ii) Suitable disease targets
 - iii) Commercially available lens results for management of ocular allergy
 - e) Optical technologies
 - i) Electronic vs optical approaches
 - ii) Head up displays
 - iii) Magnifying CL
 - iv) Accommodating CL
 - v) Military applications