A Visual Reference to Improve Specialty Lens Fitting Success

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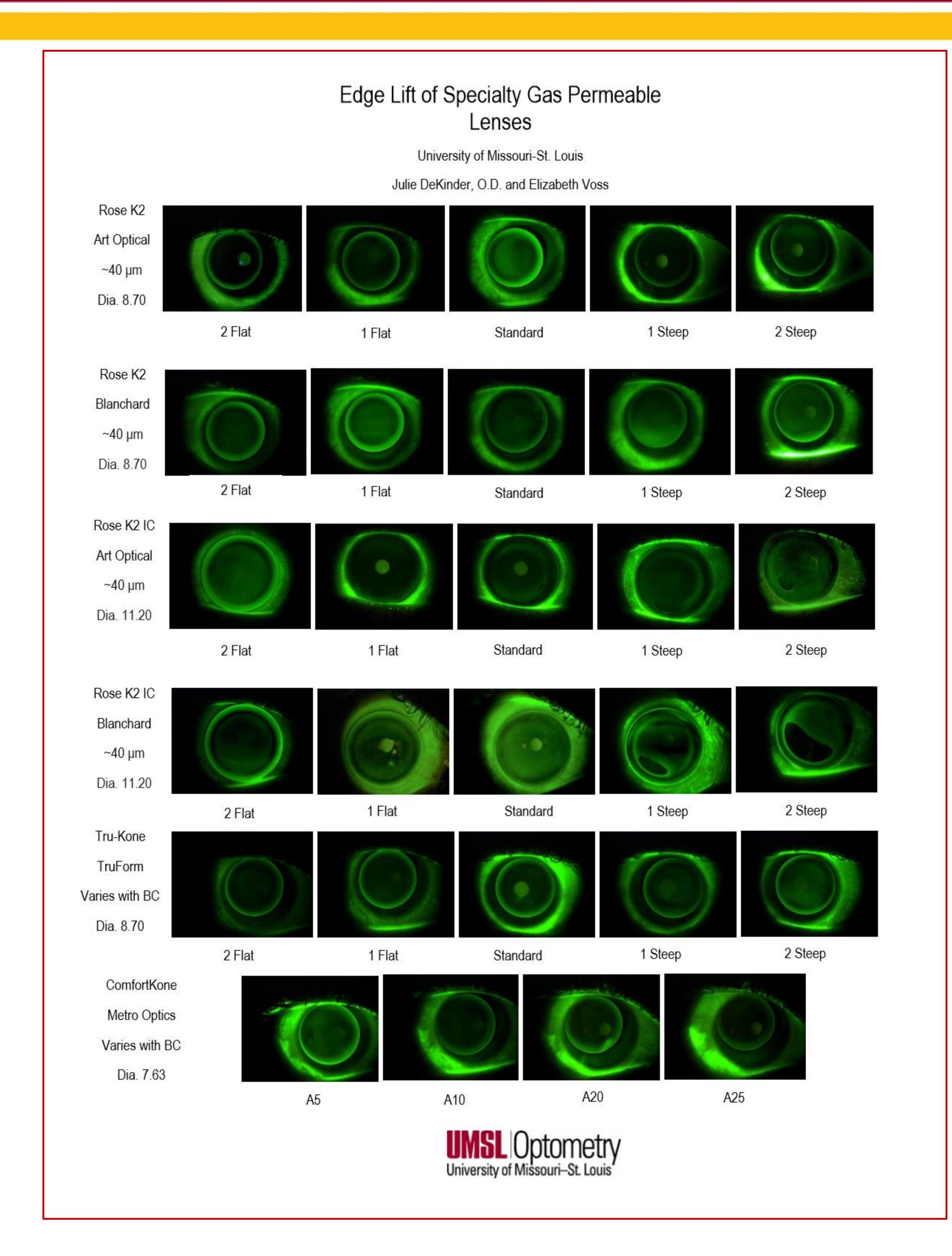### UMSL College of Optometry

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Purpose

One of the most important considerations for successful fitting of a specialty gas permeable lens is minimizing edge lift and creating peripheral lens to cornea alignment. Young clinicians frequently struggle when determining the amount of change needed to improve the peripheral fit or edge lift of a specialty corneal gas permeable lens. Many manufacturers notate edge lift changes in "steps". The micron change for each "step" can vary between different lens designs and manufacturers. This creates an additional challenge to the fitting process. The purpose of this project is to create an educational reference guide for Optometry students and young doctors that photographically shows the change of edge lift for different "steps" when using different lens designs.

Available to download @
http://www.umsl.edu/research-in-optometry/recent_conference_presentations.html

Edge Lift of Specialty Gas Permeable Lenses

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Methods

Select manufacturers were contacted to determine the micron value change related to edge lift as defined as standard, 1 step flat, 2 steps flat, 1 step steep, and 2 steps steep. The manufacturers include: Art Optical, Blanchard, Metro Optics, and Truform. The specialty lens designs include: ComfortKone, Rose K2, Rose K2 IC, and TruKone. The lenses were photographed on eye with a Haag-Streit imaging module 600 slit lamp camera. Sodium Fluorescein dye was applied to the eye and a wratten filter used to highlight the change in edge lift between the different peripheral configurations.

Conclusion

A reference guide designed to be one page in size and easily reproduced as an educational guide for classroom instruction and clinical reference. Each row is defined by a specific lens and each column is defined by a specific edge lift. Each row and each picture are labeled. The guide will aid young clinicians in recognizing the amount of change necessary to troubleshoot lens edge lift.