The Nicest Professor in the College Also Happens to be Brilliant

Nathan Lewis, PhD and Deanna Moschitta

The Person

The Academic

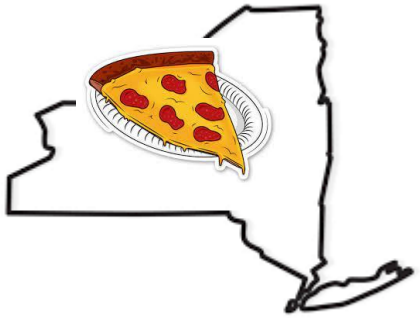
The Teacher

The Inventor

The Advisor

JIM, THE PERSON

Jim



The Nicest Guy

Happy and laid back
Creative and Brilliant at his work
Helpful and generous teacher

JIM, THE ACADEMIC

Academic Career Acheivements

UNIVERSITY of ROCHESTER

B.S. 1990, M.S. 1991

Undergraduate summers

Wyant College of Optical Sciences

Ph.D. 1995
Dissertation: Visual Performance Prediction using Schematic Eye Models

- Assistant Research Scientist, Optical Sciences Center, 1995-1998
- Assistant/Associate Professor, Department of Ophthalmology, 1998-2010
- Professor, College of Optical Sciences, 2010-2023
  - Graduated 40 M.S. and 19 Ph.D. students
- Directed University of Arizona Visual Ophthalmic Laboratory for over 20 years

Awards, Honors, and Publishing

9

Awards/Honors

1. Innovator of the Year – Academia, Governor's Celebration of Innovation 2021
2. Robert R. Shannon Endowed Chair in Optical Sciences 2020

117

journal/ proceedings papers

3

books

1. Field Guide to Visual and Ophthalmic Optics
2. Optical Specification, Fabrication, and Testing
3. Molded Optics: Design and Manufacture

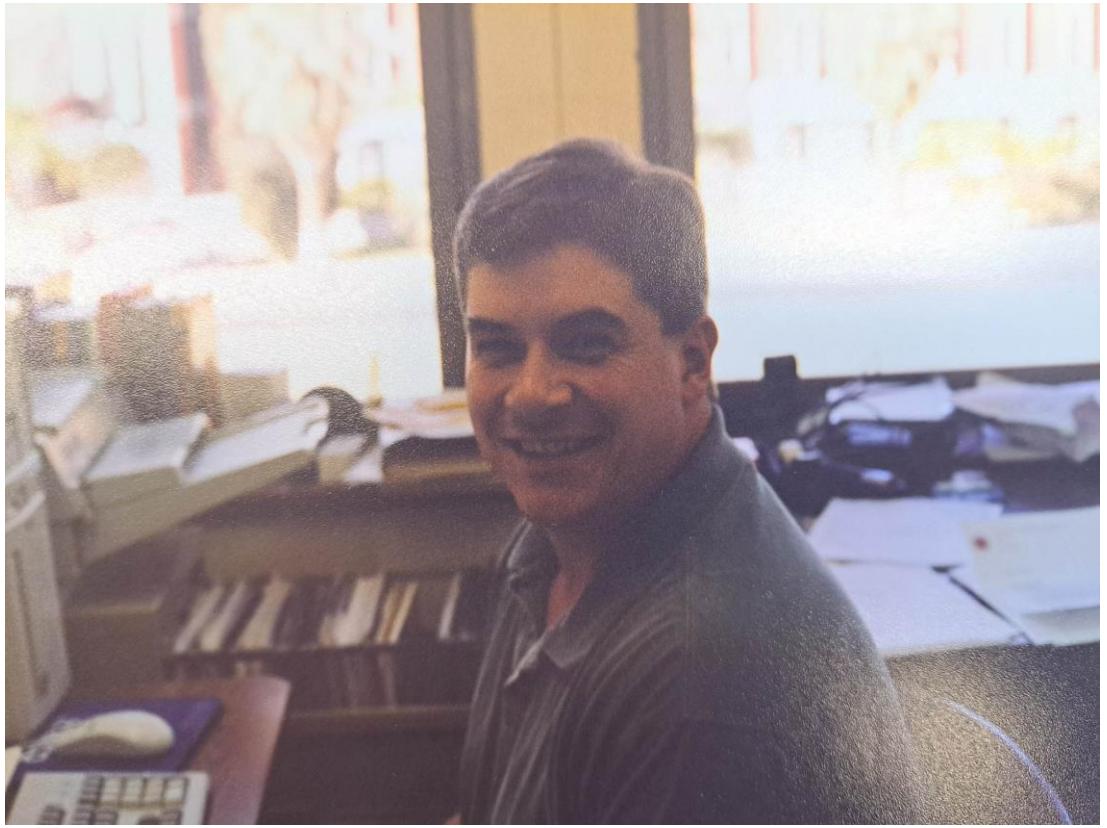
7

additional book chapters

JIM, THE TEACHER

Teacher

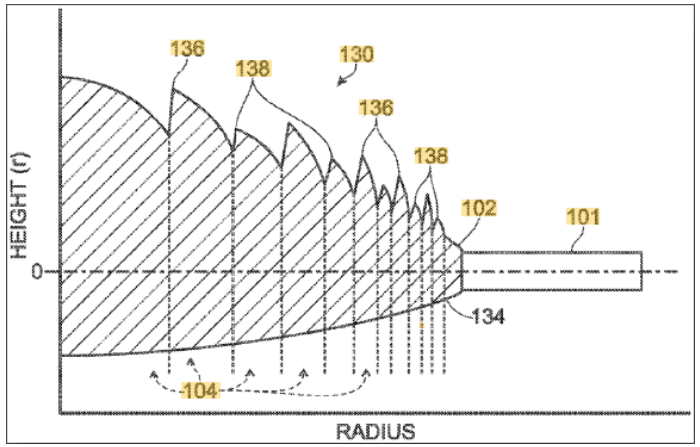
- Courses taught
  - Geometrical and Instrumental Optics I
  - Optical Specifications, Fabrication, and Testing Course
  - Visual Optics
  - Linear Systems, Fourier Optics
  - Linear Algebra for Optics
  - Computational Photography
- 2019 traveling lecturer for Optica
- Frequently taught short courses on optics for Ophthalmologists/ Optometrists



JIM, THE INVENTOR

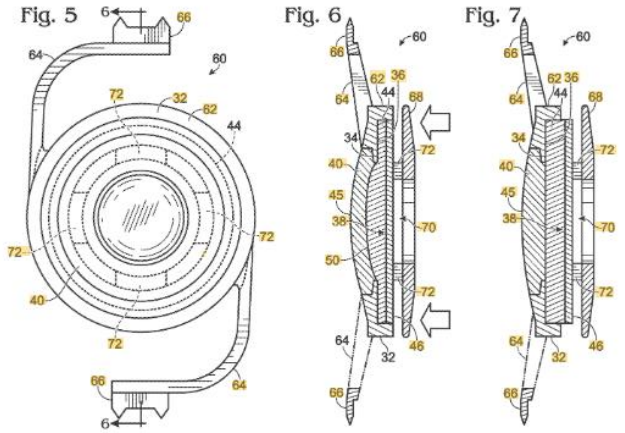
Patents – 9 total over his career

Diffractive Trifocal Lens



Launched commercially in 2015. Jim traveled to Germany to have this lens implanted in his own eye. Now over 1 million implants worldwide

Accommodating Intraocular Lens



Force applied to the posterior material causes that material to be extruded through the aperture, creating a refractive interface with the anterior

Holographic Adaptive See-through Phoropter

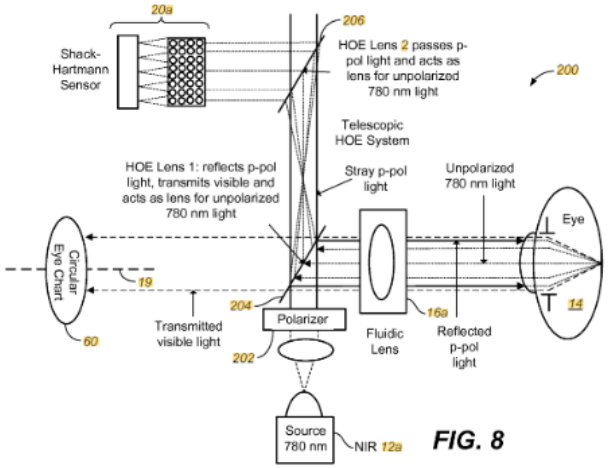


FIG. 8

Automatically measure a patient's refractive prescription while allowing the patient to view targets at both near and far distances

Regarding Trifocal IOL Patent

"Somewhere around 2007 ... I had this idea for a trifocal IOL. The idea's actually really simple. [...] The idea just kind of languished. It was something like 'Oh that's a good idea, I should do something about it' and of course you get busy with teaching, grants, and all that stuff."

"There are smart people everywhere and most inventions are evolutionary and not revolutionary. And so, you have smart people and they all have the same clues, they're all reading the same papers that you are, so somebody's going to come up with this idea."

"The more successful your idea, the more people will try to minimize or invalidate it."

JIM, THE ADVISOR

Advisor

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