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Laboratory of Vertebrate Development

Back to Biology

- Went to high school in north western New Jersey
- BA in Biological Sciences from the University
 of Delaware

 Before graduate school I designed and built fiber optic networks for computer storage arrays and managed UNIX servers

 Currently in my 4th year of study for my PhD in Molecular Biology







The Development and Growth of the Eye



The Lens

- Transparent tissue composed of specialized cells
- Focuses light in the eye
- Surrounded by a selectively permeable membrane called the lens capsule



bovine (cow) lens

My research focuses on the mechanisms behind the selective permeability of the lens capsule

Important to Understand Selective Diffusion in the Lens Capsule

- The lens is not directly fed by blood vessels
- Nutrients and other molecules required by the lens to develop and grow must diffuse through the capsule
- Protect the lens from bacterial and viral invasion

• My research will help understand how other organs filter molecules







Use a Laser to Measure Diffusion of Molecules in the Lens Capsule



Thank You

Any Questions?