

Biography of Bryan F. Shaw:

Bryan Shaw is an Assistant Professor in the Department of Chemistry and Biochemistry at Baylor University, in Waco Texas. He received his undergraduate (B.S.) degree in Biochemistry and Biophysics 1999 from Washington State University, in Pullman Washington. He received his Ph.D. in Inorganic Chemistry from UCLA in 2005. From 2006 to 2010 he worked as a post-doctoral fellow in the Department of Chemistry and Chemical Biology at Harvard University. In 2010, he began his tenure-track appointment at Baylor University. Some of his notable awards include the National Science Foundation CAREER award, and the Ruth L. Kirchstein National Research Service Award. The bulk of his research focuses on protein biophysics, and developing lead compounds to inhibit the self-assembly of proteins linked to amyotrophic lateral sclerosis.

In September, 2008, Dr. Shaw's son, Noah Shaw, was diagnosed with bilateral retinoblastoma. Noah's doctors initially missed his eye cancer. Noah's diagnosis was initiated by Elizabeth Shaw, Noah's mother. Elizabeth observed leukocoria (a white pupillary reflex) in pictures she took of Noah. Elizabeth reported her observation to their pediatrician and Noah was diagnosed that afternoon by an ophthalmologist. Noah endured months of systemic chemotherapy, removal of his right eye, laser photoablation, cryotherapy, and multiple cycles of proton beam radiation to his left eye. After this ordeal, Bryan and Elizabeth learned that Noah's leukocoria had been showing up in pictures since he was 12 days old, i.e., months before Elizabeth first noticed leukocoria. This entire experience inspired Dr. Shaw and his colleagues at Baylor University to create CRADLE (Computer Assisted Detector of LEukocoria), a free smartphone app that helps parents detect leukocoria in digital pictures, and helps doctors detect leukocoria when performing the red reflex test in conventional and unconventional clinical settings.