

# International Conference on Eye Disorders and Treatment

July 13-15, 2015 Baltimore, USA

## New frontier of therapeutic intervention for retina disease

**Tina Guanting Qiu**

Ophthalmic Innovation & Biotherapeutics, USA

Modern medicine development is alike unlocking the mystery of a black box. The 10-year drug development journey is about establishing a drug molecular biological trait along with its pharmacological behaviors in animal disease models and various human conditions. This talk will center on the paradigm shift in therapeutic intervention for retinal diseases. Topics include: 1) Emerging ocular drug delivery innovation from polymer-based sustained-release drug delivery to genetic engineered protein bio factory and RNAi/mRNA based therapeutic target (superchroid and subretinal routes begin to merge); 2) knowledge gaps in regenerative medicine and bio-nanotechnology at cutting edge front; 3) Parainflammation in retina and glaucoma disease management; 4) New highs in disease alteration by emerging therapies - the switch from “wet to dry” of vascular AMD (age-related macular degeneration) is a great example in the rising wave of anti-VEGF therapy; 5) Finally, understand disease staging and phenotype stratification is “A Must” in developing personalized treatment algorithm. New evidences suggest that AMD represents a group of heterogeneous clinical pathological entity that includes RPE aging, photoreceptor loss, Bruch’s membrane thickening, and choroid ischemia, among which one or more can be the primary trigger and predominant clinical phenotype. New appreciation of glaucoma as a neural degenerative disease involving pressure-dependent and pressure-independent risk factors may lead to a breakthrough of neural protection drug development in the 21<sup>st</sup> century. In summary, reduce photoreceptor and retinal ganglion cell loss is the ultimate goal of therapeutic intervention for a large spectrum of significant neurovascular abnormalities in the retina.

### Biography

Tina Guanting Qiu is an accomplished ophthalmology physician, trained retinal surgeon, stem cell biologist, and ocular transplant specialist with over 20 years of international experience. She had led scientific research in drug discovery, drug delivery and cell/gene therapy, established and led scientific and medical advisory boards, and served as a strategic advisor to executives in large and small companies (Inotek, LambdaVision, Sucampo, Ocata, GLG). She was Chief Medical Officer at BetaStem Inc., Senior Director at Inotek and Program Leader at GlaxoSmithKline. She has a Medical Doctor degree (with honors) from Nanchang University, a PhD in Ophthalmology from National Sun Yat-sen University in collaboration with Sheie Eye Institute, UPenn followed by post-doctoral trainings at Boston University and Doheny Eye Institute, USC. She has developed, published and lectured across US, UK, Japan and China, and been featured at Scientific American and National Eye Research Center, UK.

[tina70qiu@gmail.com](mailto:tina70qiu@gmail.com)

### Notes: