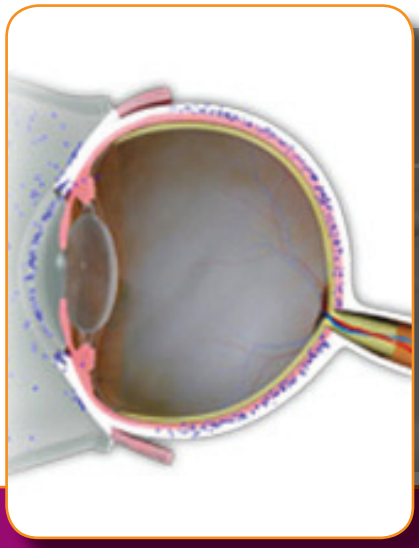

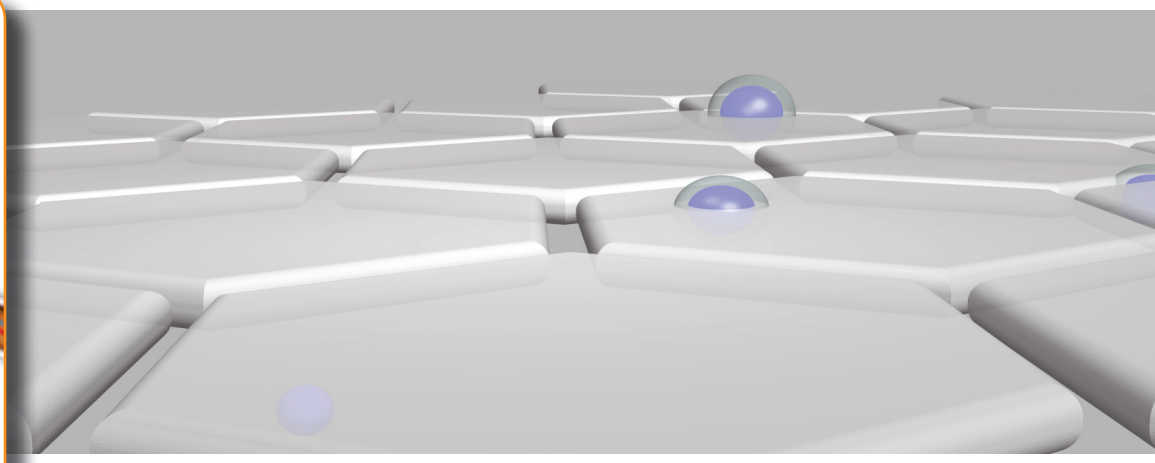

Nanotechnology at work

Nanotechnology is an emerging scientific field creating materials, devices, and systems at the molecular level. By being able to work at this ultra-small scale, nanotechnology is being used to deliver innovations in industries including clean energy, environment, health and personal care, electronics, transport, construction, telecommunications, manufacturing and mining.

Needle-free drug delivery for eye diseases

Currently, hundreds of millions of people worldwide are afflicted with eye diseases. Depending upon the condition, treatments can vary from eye drops, surgery and more recently to drugs delivered by injection directly into the eye. Monthly injections are required to treat potentially blinding eye diseases such as wet Age Related Macular Degeneration and Diabetic eye disease.

Seagull Technologies has developed an innovative non-invasive device called the SonoEye™, which uses a combination of nanotechnology and ultrasound to replace injections, and non-invasively deliver drugs to the front and/or back of the eye. Seagull uses the properties of polymer gels combined with ultrasonic stimulation to facilitate the storage and release of regulated drug doses. Using this process, drugs pass through and between cells in the body to the target area. Nanoparticles can be used to coat certain drugs when required to protect the drugs, and assist their ability to bind to the polymer or aid in their ability to penetrate biological membranes. However, the actual process of delivery strips the nanoparticle coating off so that only the drug reaches the target area.

The key advantage of using a nanoparticle coating in this process is that the raw drug is protected during the transmission process through membranes, which allows for the regulated dose to hit the target area with full effect.

SonoEye™ eliminates discomfort as well as the severe risks of injection into the eye such as infection, retinal detachment and hemorrhage. This non-invasive device has delivered drugs ranging in size from very small molecules to large proteins to the retina in a few seconds.

The controlled and safe delivery of drugs by the SonoEye™ device enables doctors, nurses and potentially patients themselves to easily administer treatments as appropriate. This is extremely beneficial to patients with chronic diseases such as Macular Degeneration and Diabetic Eye Disease who may require frequent treatments for many years.

Seagull's technology platform for non-invasive drug delivery (patent applied for PCT/AU2007/000843) is currently being developed to deliver drugs and biological entities non-invasively to other organs and tissues in the body, so the full benefits of this nanotechnology based process can painlessly alleviate a range of ailments.

SEAGULL technologies

ABOUT SEAGULL TECHNOLOGIES

Seagull Technologies was established in 2004 to develop and commercialise novel and potential non-invasive drug delivery devices.

CONTACT SEAGULL TECHNOLOGIES

t: +61 (0) 412 666 621

e: harry.unger@seagulltechnologies.com.au

w: seagulltechnologies.com.au