

Newsletter July 2020

Spasm HealthCare Museum Building 6 Victoria Rd Gladesville
No 1 gate house at the Crown Street bus stop on Victoria Road Gladesville



Welcome to new Life Members Richard Morris and Debbie Dobbs. Thanks to all who paid their subscription before June 30. Unfortunately due to Covid our museum remains closed to visitors, our AGM previously scheduled for August is postponed. While we are in this difficult period, the executive and committee are meeting on the 4th Mondays via Zoom. Individual volunteer members are visiting the museum to ensure the collections are secure and cleaned. As a member you would be welcome to join us on individual days, by arrangement, as there is much we can do to highlight our collections in preparation for reopening.

We have recently received donations of a beautiful booklet published in 1936 "Milestones in Optical History" by Bausch & Lomb Optical Co Rochester NY USA, a sample display case containing spectacle frames, beautiful ornamental opera glasses and a lovely example of an 100 year old binoculars. These all tempt us to develop a new "optics display". At the museum we already have a operating microscope and number of interesting early instruments used by opticians and doctors to test eyesight. We have also an early desk model microscope previously not on display that we can add to this new collection.

Optical Science has influenced so much of our life and world. Early pioneers developed telescopes, which **looked up** to the stars and planets, they developed microscopes, which **looked down** to previously invisible microbes that have existed and evolved since the beginning of life. (Something in this current Covid situation we may all be interested) Both these developments have assisted pioneers who **looked out**, to develop eyeglasses and lenses to assist those who have problems with sight. Our back page contains part 1 of a new 2 part series - for those who may be interested in this field of **Optic Scientific development**.

Visiting the HealthCare Museum in real time or online.

Opening hours for the Museum is normally 11 am – 3pm on the 2nd Saturday and 4th Monday of each month - February to November. **The museum will be closed to the public until further notice. Members are welcome to attend on specific days as organised with individual volunteer Guides.**

Executive Members : President Sandra Solarz
Curator Gary Klopfer
Secretary /Treasurer Ros Berryman
Volunteer Guides: Val Corcoran, Kate Paton, Margaret Warby & Peter Hartigan

Contact SPASM by- Phone 0414 993 138

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SPASM web sites at www.spasmuseum.org.au

<https://ehive.com/account/5547>

www.discoverhuntershill.com.au/whats-on

Like us on Facebook: [Society for the Preservation of Artefacts of surgery and medicine SPASM](https://www.facebook.com/SocietyforthePreservationofArtefacts)

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2 of the 4 recent donations



Wollaston Optometer donated by Helen Amos

Retinoscope used to test myopia C 1950's



Bosch and Lomag Microscope used by ENT, Plastic, Hand and Ophthalmologists C1950's donated by Mrs. Julie Polich

Moorfield Spectacle Frame and lenses



Entry to the Museum takes you to another era:

BUILDING 6

Room 1 takes us to a 1911 Consulting room: "**The consulting room of Dr. John Sand Smyth**" who practiced in Warwick Queensland. Items from the Five Dock GP Dr. Menzies collection are also in the large display case.

Room 2. The surgical "pick room" contains instrument cupboards with a large display of surgical instruments, blood collecting apparatus and interesting items. We will be adding a selection of orthopaedic instruments and prostheses.

The corridor to the library area takes you past a display of hearing trumpets, tracheostomy tubes a display of **early syringes** and other historical equipment.

The haemostasis room is home to: an impressive collection of diathermy machines and other methods used to provide haemostasis.

The St Thomas Hospital Operating Theatre Room has recently had a new ceiling installed, and a new display will be set up on this area. The early operating table, as well as early anaesthetic and surgical equipment will soon be on display again in this area. **We would love to find a sponge rack to add to this room. Does any one know where we might procure one?**

The sterilizing area We have added the portable operating table, and world war instruments to this area. The small formaldehyde cupboards and dental equipment are still on display as well as the small sterilizing water baths.

BUILDING 1

The Anaesthetic Room which showcases the changes in anaesthetic apparatus used by surgeons, dentists and anaesthetists over the years displaying improvements in safety and monitoring of the anaesthetised patients over the years.

The Corridor gives a time line of the Tarban Creek Asylum - Gladesville Hospital

The Gladesville Room has ECT machines, straight jackets, & mittens. There are photographs and stories from patients and attendants.

The pharmacy room shows beautiful jars, household remedies and also have some early dispensing records.

OPTICAL SCIENCE. Part 1 of 2

The first historical reference to glasses is in the writings of **Confucius** about 500 BC. He believed that he relieved the eyes of a cobbler with glasses, but there is no record that he knew anything about the laws of refraction. His glasses were believed to possess medicinal properties. When Marco Polo visited China in 1270 the people were using lenses, but superstition and etiquette governed their use. For example it was believed tortoise shell frames extended life and glasses were worn to indicate position, possessions, professions, intelligence and even idiocy. The lenses were made of heavy quartz and other crystals.

An Arabian mathematician **Alhazen** (956 -1038) was born at Basra Iraq. He wrote nearly 200 works, two of which contained fundamental principles of optics recorded for the first time: "*De Optica*" and "*De Luce*". He taught that "visual rays pass from the object to the eye and that light travels in rectilinear paths through uniform media from every point of a luminous body in the direction of every straight line that can be drawn from that point". He demonstrated the true behavior of light as it passes from a rare to a denser medium, and stated that "the angles of incidence and refraction were related to each other". But he did not discover the law connecting them, this was discovered 600 years later by **Snell**.

Witelo of Silesia (1230-1275). In the thirteenth century, Witelo wrote a ten volume work on optics called "*Perspectiva*". This served as the standard text on the subject until the seventeenth century. Both he and Alhazen rejected the common belief at the time "that light rays were emitted from the eyes, instead suggesting that the eyes were passive receivers of light reflected from other objects". Witelo's work on optics was so extensive that the first major addendum to it was not undertaken until several centuries later, when **Johannes Kepler** published his "*Supplement to Witelo, in Which Is Expounded the Optical Part of Astronomy*" in 1604

Roger Bacon (1214-1294) was an English scholastic philosopher. He gained a doctor of Theology from the University of Paris. He spent 40 years studying and lecturing on natural science at Oxford University. His works include treatises on optics (or perspective) mathematics, chemistry, arithmetic & astronomy. He used optical and mechanical instruments such as mirrors & telescopes. He created a rainbow by passing light through glass beads. In 1276 he alluded to glasses and described them as useful to those "who are old and have weak sight. In 1285 Heinrich Goethals was commissioned to interview Pope Martin IV regarding glasses, so glasses, to assist sight, must have been used at this time.

In 1483 the **Guild of Master Spectacle Makers** was formed in Nuremburg, it was considered a trade, like a bootmaker. Lenses were ground, fitted in frames, which sat on the nose. They were sold on the streets where the buyer selected a suitable pair. Some of the makers "were fine artisans catering to desire and adornment of the rich". In 1604 **Kepler's** explanation of lenses and their effects helped the guilds immensely.

References: "*Milestones in Optical History*" by Bausch & Lomb Optical Co Rochester NY USA 1936

"*Molecular Expressions Science Optics & You*" in their section of "*Pioneers in Optical Sciences.*" <https://micro.magnet.fsu.edu/optics/timeline/people/index.html>

