From the President’s Desk......
Dear Readers,
Warm greetings to everyone.

It gives me great pleasure to greet all the delegates to VRSI’s XVIIth Annual Conference at Raichak. I am sure that the paper presentations, the workshops, the free papers that are awaiting us in the next few days will make this an immensely stimulating experience for the involved members.

Looking back, Vitreo Retina Society of India was founded in the year 1992, by a small group of 20 Vitreo-Retina specialists under the presidency of Dr. T. N. Ursekar. From a small exclusive group, VRSI has expanded to over 300 Vitreo-Retina specialists with over 90% of the India’s actively practicing Vitreo-Retina specialists being its life members.

VRSI strives to update its members with the latest knowledge and surgical techniques in the world of vitreoretinal surgery - to enable them to respond compassionately to their patients' individual needs and to advance the highest standards of comprehensive eye care. To meet these goals, VRSI has always convened a wide variety of scientific and academic programs. Work has also progressed to start a web based VRSI Retina Blog Forum, where VRSI members can get consultations on complicated cases.

In this newsletter, we have highlighted the recently discussed advances in vitreoretinal surgery such as the possibility of a 27 gauge vitrectomy which was just one of the many interesting concepts and ideas discussed on the Retina sub specialty day at the American Academy of Ophthalmologists’ conference at Atlanta earlier this month.

I am sure that the readers will find this newsletter to be an interesting read. With interesting talks on a variety of topics and brilliant speakers not just from India but also from around the globe, this VRSI conference will surely be an intellectually and socially rewarding event for all the delegates.

Long Live VRSI.

Saint Thiruvalluvar’s Thirukkural (Possession of Wisdom - Verse 421)
“Wisdom is a weapon with which a man may ward off destruction.
It is an inner fortress which no enemy can assail.”

Warm Regards,
Dr. S. Natarajan
President, VRSI
AAO joint meet in Atlanta: an ‘eye opener’

Founded in 1896, American Academy of Ophthalmologists or AAO is the world’s largest association of eye physicians and surgeons—Eye M.D.s—with more than 27,000 members worldwide.

This year the AAO had its Joint Meeting with the European Society of Ophthalmology (SOE) at Atlanta, Georgia, USA. Atlanta, which houses the headquarters of Coca Cola and CNN TV network is a vibrant, captivating, entertaining city and full of surprises.

The event saw more than 21,000 attendees who enjoyed programs such as ‘Breakfasts With the Experts’, Instruction Courses, Skills Transfer Labs, Spotlights and other informative symposia.

The Event also featured subspecialty features with focus on a particular branch of ophthalmology where more than 6,000 attendees enjoyed six comprehensive meetings on each of in refractive surgery, retina, cornea, glaucoma, pediatric ophthalmology and uveitis. More than 500 companies exhibited at the Joint Meeting.

Retina 2008: The latest from the world over

At the AAO-European Society of Ophthalmology joint meeting; AAO, in conjunction with the American Society of Retina Specialists, the Macula Society, the Retina Society, and Club Jules Gonin; presented the Retina Subspecialty Day Program on Nov 7-8, at Atlanta.

The subspecialty day dealt with all aspects of AMD – Neuroprotection, Immunology, Instrumentation and techniques and the newer concepts in its pharmacologic therapy. Genetic factors felt to be contributory to the development of AMD were discussed. The speakers paid particular attention to the recent finding of the role that a mutation in the complement factor H gene plays in the etiology of AMD.

Other significant topics covered included the Translational Advances in The treatment of Diabetic Retinopathy, Anti VEGF treatment for CRVO and the clinical issues in Gene therapy for Retinal Degenerative issues apart from a comprehensive look at Retinal Oncology.

However, the most interesting presentations were those that discussed 25G, 27G and 29 Gauge Vitrectomy for Complex Vitreoretinal diseases which we have focused on in this newsletter.

All in all, the retina sub specialty day gave us a glimpse of the latest research and threw light on the various vistas and viewpoints on the management of retinal diseases from the world over. (Details & abstracts of the articles are available in the AAO-SOE Retina Sub specialty Day guide and at the AAO website)
Dr. Frank Koch

Dr. Frank Koch is a name synonymous with modern VR surgery. Currently, he is running the department of vitreoretinal diagnostics and surgery of the University Eye Clinic, Johann Wolfgang Goethe University, Frankfurt.

His innovative talents have resulted in many substantial products improving the bimanual working options for microscopic vitreoretinal surgery, endoscopic minimal vitreoretinal surgery as well as the setup of a unique vitreoretinal simulator for a safer more efficient education in ophthalmic surgery.

He has been the recipient of many awards such as the “Achievement Award of the AAO” and the “American Vitreous Society Honor Award”.

Dr. Koch will deliver the Nataraja Pillai Oration on ‘Reality and Virtual Reality in Modern VR Surgery’ at 1130 a.m. on 5th December, 2008.

Dr. Eugene De Juan, Jr.

Renowned retinal surgeon, inventor and entrepreneur Dr. Eugene de Juan, Jr serves as Vice-Chairman of ForSight Labs and he also holds the “Jean Kelly Stock Distinguished Chair” in Ophthalmology at the University of California, San Francisco. He has patents on over 40 medical devices and is responsible for more than 200 academic publications. He is a passionate supporter of ophthalmic education and development and has recently helped established a chair for Ophthalmic Education at Johns Hopkins University.

Dr. Eugene De Juan, Jr will be speaking on ‘Epiretinal Beta Radiation for Neovascular AMD’ at 1157 a.m. on 5th December at the conference.

A Living Legend: Dr. Harvey Lincoff

Pioneering Vitreoretinal surgeon Dr. Harvey Lincoff is an internationally recognized retinal specialist and a research scientist. An alumnus of the University of Pittsburgh, he has more than 200 peer-reviewed articles. Noteworthy are his development of cryopexy, the soft silicone sponge buckle, the scleral balloon (both of which bear his name) and the use of perfluorocarbon gases for an internal tamponade.

An expert on retinoschisis, he defined its presence in optic pit maculopathy and proliferative diabetic retinopathy. The American Academy of Ophthalmology presented its Lifetime Achievement Honor Award to Dr. Harvey Lincoff at Atlanta this year. He also delivered the inaugural Charles L. Schepens Lecture ‘Evolution of Retinal Surgery: A Personal Story’ at the AAO meet on Nov 7, 2008. (Full Text at 2008 Retina Subspecialty Day, Retina: Vistas and Viewpoints, Sec III, Page 26)
27-Gauge Vitrectomy - Is it possible?
Yusuke Oshima MD, Yasuo Tano MD

Current MIVS – Micro Incision Vitrectomy Surgery, transconjunctival sutureless vitrectomy using 23- or 25-gauge instrumentation does not address wound sealing-related complications such as hypotony, choroidal detachment and an increasingly high incidence of endophthalmitis, which are critical concerns amongst vitreoretinal surgeons.

Current concepts of 27-Gauge Vitrectomy: Ultra minimally Invasive Surgery
The salient features are that it is a silent surgery (ie, slow inflow and outflow), microinstrumentation with minimal manipulation, superb wound-sealing, elimination of the risk of wound integrity-related complications, much less post-operative inflammation, ultimately reduced patient discomfort with shorter visual rehabilitation. The current indications are Macular diseases (Macular Hole, Eiretinal Membrane proliferation, Macular edema, Macular traction syndrome, Subhyaloid and/or sub-ILM haemorrhage), Simple vitreous haemorrhage, Vitreous biopsy, Management of Cataract Surgery complications.

Development of 27-Gauge Instrumentation
Advancement in illumination systems and light fiber development (27-Gauge chandelier illumination fiber, 27-Gauge twin light chandelier illumination fiber, 27/29-Gauge one step chandelier illumination fiber, 27/29-Gauge one step illumination light pipe), 27-Gauge microforceps (Asymmetric microforceps, End-gripping microforceps), 27-Gauge Vitrectome (Prototype) – This is a key development. The area \(0.079\,\text{mm}^2\) of the port of the 27-Gauge vitrectome is equal to or slightly wider than the commercially available 25-Gauge vitrectome \(0.066\,\text{mm}^2\). The shaft length was shortened to 28mm. The cutting efficiency (capable upto 2500 cpm) of the prototype 27-Gauge vitrectome does not exceed that of the 25-Gauge vitrectome. Nevertheless, because of its wide port design and fine gauge, the 27-Gauge vitrectome can be used as a passive aspirator, membrane pick and membrane scissors, which eliminates the need for frequent instrument exchanges. The forthcoming 27-Gauge instruments include the 27-Gauge diamond-dusted membrane scraper and the 27-Gauge endophotocoagulation probe.

Development and refinement of the 27-Gauge instrument will continue over the next few years leading to its further refinement which will allow us ultra minimally invasive surgery for vitreo-retinal diseases in the near future.

(For Full Text Article, refer 2008 Retina Subspecialty Day, Retina: Vistas and Viewpoints, Section IV, Pages 49-51)