

EDITORIAL

Patients more Inclined to Regular Eye Check Ups

The Ophthalmology is a fascinating field, gaining prominence and momentum along with other medical sciences due to the increase of eye ailments among the patients of all ages. The ophthalmology field is currently experiencing a notable surge in demand, driven by two key factors: the increasing prevalence of eye disorders and a heightened awareness of healthcare among the global population. With eye conditions such as refractive errors, age-related macular degeneration and glaucoma, individuals are actively seeking proactive solutions and specialized treatments for their ocular health. This heightened healthcare awareness is leading to early diagnosis and a proactive approach to seeking treatment, increasing the demand for therapeutic solutions. Patients are now more inclined to prioritize regular eye check-ups and are embracing advanced ophthalmic procedures. This growing awareness not only facilitates the early management of eye conditions but also drives the adoption of innovative technologies and treatments, thereby fuelling the overall growth of the ophthalmology sector.

Challenges: Despite its promising growth, the ophthalmology

scenario has some big challenges. The main issues are the high costs of treatments, stringent regulations and shortages of skilled ophthalmologists. Ophthalmic treatments and surgeries are expensive, from diagnostics to surgical procedures, making it hard for some people to afford essential care. This can lead to delayed or missed treatments, hurting patient outcomes and slowing market growth.

The global shortage of skilled ophthalmologists is impacting eye care and public health. Key factors include an aging population with more eye conditions, a lengthy training pathway limiting new entrants, and uneven geographic distribution leaving rural areas underserved.

Overcoming these challenges will require concerted efforts from many across the industry, including healthcare providers and innovators. By addressing these issues, the ophthalmology sector can fulfill the growing demand for advanced eye care solutions, ultimately improving patient outcomes and enhancing public health standards.

Against this backdrop, by leveraging the technological advancements in the field, Sankar Foundation continues its pursuit with a strong contingent of over 45 Ophthalmologists, dedicated and

Independence Day Celebrated



Sri Krishna Kumar, Trustee unfurled the National Flag on the occasion in the presence of Sri Radhakrishnan, Prof K Krishna Prasad, Dr NJ Sirisha.

Sankar Foundation Eye Hospital, Naidutota, Visakhapatnam, joined the Nation in celebrating the Independence Day with patriotic fervor and gaiety in its sprawling green campus.

Sri Krishna Kumar Atmakuri, Trustee, Sankar Foundation, in the presence of Sri K Radha krishnan, General Manager (Admn & Operations), Prof K Krishna Prasad, Principal, Medical Education, Dr NJ Sirisha, Dr Raveendra, unfurled the National

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committed workforce and boasts a state-of-the-art infrastructure facilities.

The main Hospital at Naidutota and its branches are rendering high quality services to the patients with affordable cost and compliance with statutory norms. Patient footfall is increasing day by day due to rendering of quality eye care services and very successful eye surgeries.

K. Raveendra Kumar
Editor



The dignitaries releasing the newsletter on the occasion.

Flag, took the salute and inspected the guard of honour presented by the students of College of Optometry, Sankar Foundation.

Addressing the employees and students, Sri Krishna Kumar called upon the employees to put more efforts to sustain the spirit and achieve excellence in its operations. He congratulated the employees and doctors for achieving a notable performance in its journey towards excellence.

Sri K Radhakrishnan, General Manager (Admn & Operations), Prof K Krishna Prasad, Principal, Medical Education, Sankar Foundation spoke on the occasion and highlighted the services of the hospital to the community.

Monthly Newsletter "VISIONARY INSIGHTS" Launched

The dignitaries released a newly started a monthly in-house newsletter "Visionary Insights" of Sankar Foundation to mark the occasion. The newsletter covers



insights in Ophthalmology, achievements of the hospital, latest advancements, breakthrough treatments and sharing inspiring stories of recovery and resilience etc. Smt Alekya, faculty compered the programme. The dignitaries distributed prizes to the students of the march fast. A large number of doctors, employees and students were participated in the celebrations.

Barzilai Foundation

A free eye camp was organized by Sankar Foundation supported by **Barzilai Foundation** to



screen students at Gandhinagar GVMC High School in Ankapalle and at ZPHS, Chowdudava in Anakapalle district. Around 1000 students screened during eye camp held from 20th to 22nd August.

Free Eye Camps organized



Sankar Foundation organized free eye camps in Chitrakonda in Malkangiri district in Odisha from 27th August to 1st September, 2024 in six tribal villages and screened 1450 tribal residents from very remote villages. **The eye screening camps were supported by Arcelor Mittal & Nippon Steel (AM & NS) under their CSR initiative.** Free medicines and spectacles were distributed to the patients.



State-of-the-Art Facilities at Sankar Foundation Eye Hospital

Sankar Foundation Eye Hospital is equipped with the state-of-the-art facilities with eight modern OTs and best of the infra facilities to cater to the needs of people of this region. A strong team of 45+ very experienced ophthalmologists at Sankar Foundation, is dedicated to providing comprehensive care for these and other eye conditions, ensuring the best possible outcomes for our patients, and treat a wide range of common eye conditions to help maintain and improve our patients' vision and eye health. Our specialists will treat these conditions include: Age-Related Macular Degene-



ration, Amblyopia (Lazy Eye), Astigmatism, Cataracts, Color Blindness, Diabetic Retinopathy, Dry Eye, Floaters, Glaucoma, Pink Eye, Cornea replacements, Pediatrics & Squint etc.

Sankar Foundation Demonstrates Excellent Performance

Sankar Foundation Eye Hospital has consistently demonstrated excellent performance in providing high-quality eye care services. Located in North Coastal Andhra Pradesh, this tertiary eye hospital is renowned for its comprehensive ophthalmic services, which include medical retina services, cataract services, glaucoma services, surgical retina services, oculoplasty and reconstructive surgery, orbit surgery, pediatric ophthalmology, cornea services, refractive services, and community ophthalmology.

Performance @ a Glance - August 2024

Total Eye Surgeries

4,55,135 Since Inception

Total OP Screened

26,49,830 Since Inception

* Total Eye Surgeries	2895
* Cataract Surgeries	2146
* Retina Surgeries	95
* Retina Injections	169
* Glaucoma Surgeries	17
* Cornea Surgeries	222
* Pediatric Surgeries	05
* Orbit & Oculoplasty	52
* Total OP Screened	16,311

Branches

* Srikakulam Eye Surgeries 500+11 Injections	
* Maddilapalem 102 + 8 Injections	
* Gajuwaka	19
* Madhurawada	10
* Total 44 Outreach free eye camps conducted and screened 3276 patients	

Do You Know?

Who is the father of ophthalmology?

George Bartisch (1535-1607), a German physician who wrote extensively on eye disease in the 16th century, was perhaps the most well-known oculist of his time and is considered by many to be the father of modern ophthalmology.

Who is the father of optometry?

Irvin M. Borish (January 21, 1913 - March 3, 2012) was an American optometrist who is widely considered "The Father of Modern Optometry".



Which celebrity is blind?

Singer-songwriter, musician, and record producer Stevie Wonder is one of the most well known blind celebrities in the world. Wonder was born six weeks premature, which resulted in retinopathy of prematurity, a condition in which the growth of the eyes is aborted and causes the retinas to detach, causing blindness. (Source 3playmedia.com)

Which is the first eye hospital in India?

Vintage Vision and its mission - India's first and World's 2nd oldest Eye Hospital. The Regional Institute of Ophthalmology and Government Ophthalmic Hospital in Chennai established in 1819 is of great historic importance to the Medical fraternity of India.



Who is the first eye donor in India?

Late Dr RES Muthiah started the very first eye bank in India and the first corneal transplantation took place successfully by him in India in 1948. From then on a movement started for donation of eyes. The prime concept of Eye Bank Association of India (EBAI) is to motivate the people for eye donation.

Who is the global leader in eye care?

Alcon is the global leader in eye care, dedicated to helping people see brilliantly. With an over 75-year heritage, Alcon is the largest eye care device company in the world, with complementary businesses in Surgical and Vision Care. Alcon's presence in 50 countries and serve patients in more than 140 countries.

Who is the father of vision?

Ultron is father of vision because Tony Stark invented ultron so Upton made a robot which should destroy the world but black widow stole the robot which is made by Upton to Hawkeye's.

Which is the largest eye hospital in India?

Over 4.5 lakh eye surgeries or procedures are performed a year at Aravind, making it the largest eye care provider in the world. Since its inception, Aravind has handled more than 6 crore (65 Million) outpatient visits and performed more than 78 lakh (7.8 million) surgeries.

(Inputs: **K Bangar Raju**, Dy General Manager (PR & Liaison))

Dr NTR Vaidya Seva



A flagship scheme of all health initiatives of the Government of Andhra Pradesh to provide quality health care to the people. In order to facilitate the effective implementation of the scheme, the State Government set up the Dr Nandamuri Taraka Rama Rao Vaidya Seva Trust, under the chairmanship of the Honorable Chief Minister. The Trust is administered by a Chief Executive Officer who is an IAS Officer. The trust, in consultation with the specialists in the field of insurance and healthcare, runs the scheme. **The previous AP Government's Dr YSR Arogya Sree Health Scheme has been rechristened as Dr NTR Vaidya Seva.**

Top 10 Ophthalmology Colleges in India Based on 2024 Ranking

- All India Institute of Medical Sciences (AIIMS), New Delhi
- Post Graduate Institute of Medical Education & Institute, Chandigarh
- Christian Medical College (CMC) Vellore
- Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow
- Banarus Hindu University, Varanasi
- Kasturba Medical College, Manipal
- Jawaharlal Institute of Post Graduate Medical Education & Research, Pondicherry
- King George's Medical University, Lucknow
- All India Institute of Medical sciences, Patna
- Sri Ramachandra Institute of Higher Education & Research, Chennai
- We will be here soon

Good Clinical Practices training session



Dr. T. Raveendra, Director, CQI and Research & Head-Glaucoma speaking on the occasion

Sankar Foundation is committed to offering excellent eye care and supporting our community through outreach, education, and research. Recently, we organized a Good Clinical Practices (GCP) training session for experts to enhance our research oversight. The meeting was attended by our faculty and External Dignitaries **Prof. Dr. Sunil Moreker**, Senior Ophthalmologist from Mumbai; **Dr. Kranthi Kumar Gangu**, the Dean of R&D at Vignan's Institute of Information Technology; **Prof. Dr. B. Dharma Raju**, an Ophthalmologist at NRIIMS, Vijayanagaram; **Dr. Ch. Meena**, a Consultant Micro-

biologist at Vijaya Medical Centre; **Dr. V. Gayathri**, a Microbiologist at CARE Hospitals; **Dr. N.P. Siresha**, a Pharmacologist at Govt Medical College, Vijayanagaram; Prof. **Dr. Sree Sudha**, an Academician in Law from School of Law in Chennai and; **Mrs. Bhusarla Saroja**, a self-employed Advocate; **Prof. Dr. G. Sudharsana Rao**, an Honorary Professor in the Dept. of Commerce and Management Studies at A.U; and **Mr. Yaddanapudi Balaji**, the Former Executive Director (HR) at RINL Vizag Steel Plant, **Dr. Krishna Prasad**, Prof. Medical Education and Foundation doctors.

NABH Accreditation renewed to Sankar Foundation

Sankar Foundation Eye Hospital at Naidutota has been granted renewal of Accreditation of NABH under Eye Care Organization. A communique to this effect was received by Sankar Foundation on 21st August, 2024 by the Accreditation Committee. The Accreditation is valid for three years (2024-27) subject to continued compliance with NABH guidelines.



Scope Recommended: "Anesthesiology, Ophthalmic Emergency, Comprehensive Ophthalmic Services, Cataract Services, Glaucoma Services, Medical Retina Services, Surgical Retina Services, Oculoplasty & Reconstructi Surgery, Pediatric Ophthalmology, Cornea Services (excluding transplant), Strabismus, Community Ophthalmology".

Sri K Radhakrishnan, GM (Admn & Operations) congratulated the doctors, paramedical staff and the entire collective of the hospital for the united efforts in achieving this milestone.

"Maintaining Corneal Health is vital for clear vision"



- Dr Nasrin, Director
Medical Admin &
Training & HOD Cornea

The cornea is a crucial part of the eye, playing a significant role in vision and overall eye health. It is the transparent, dome-shaped surface that covers the front of the eye, including the iris and pupil. The cornea's primary function is to refract or bend light, which is essential for focusing vision. Here are some key points about the importance of the cornea in eye care.

This blog by Dr Nasrin highlights the importance of Cornea, a vital part of the eye and the reasons for Corneal ailments.

The cornea is responsible for approximately 65-75% of the eye's total focusing power. It bends light rays as they enter the eye, directing them towards the lens, which then fine-tunes the focus onto the retina. Any irregularities in its shape can lead to refractive errors such as myopia (nearsightedness), hyperopia (farsightedness) and astigmatism.

The cornea acts as a barrier against dirt, germs, and other particles that can harm the eye's delicate components. It also filters out some of the sun's ultraviolet (UV) rays, providing additional protection to the inner structures of the eye. Maintaining corneal health is vital for clear vision.



Some of Keratoplasties done at
Cornea dept -SFEH



Dr. Nasrin examining a patient along
with her team of doctors

Conditions such as corneal dystrophies, infections, and injuries can significantly impact vision quality. Regular eye check-ups and prompt treatment of any corneal issues are essential for preserving eye health.

Corneal transplantation is an operation to remove all or some layers of a damaged cornea and replace it with healthy donor tissue. Corneal transplantation is often referred to as keratoplasty or a corneal graft. It can be used to improve sight, relieve pain and treat severe infection or damage.

Common indications for Keratoplasty

- **Keratoconus:** A condition that causes cornea to change its shape.
- **Corneal scarring:** This can be traumatic, post-infective, or congenital.
- **Bullous keratopathy:** This can be aphakic or pseudophakic (post cataract surgery)
- **Endothelial dystrophies:** These can be congenital hereditary or other types.
- **Other conditions:** These include stromal dystrophies, corneal degenerations, and post-herpes leucoma.

- Corneal perforation, non resolving Cornea ulcers (Therapeutic)

Reasons for Corneal ailments

Corneal diseases can arise from various causes, and understanding these reasons is crucial for effective diagnosis and treatment. Here are some key points:

Corneal Ulcers: A corneal ulcer can present with redness, severe pain, foreign body sensation, watering, blurring vision, thick discharge, pain when looking at bright lights and swollen eyelids. white spot on cornea. The causative organisms are viruses, bacteria, fungi and parasites. Risk factors include ocular trauma, contact lens use, prior corneal surgery, and systemic conditions like diabetes, HIV positivity, and leprosy. It leads to impaired wound healing, corneal ulceration, and stromal inflammatory infiltration

Corneal Dystrophies: These are a group of genetic disorders that cause abnormal deposits of proteins and other substances in the cornea. Symptoms can include blurred vision, glare, and eye pain. These deposits can lead to distorted vision and can be diagnosed through various tests.

Keratoconus: A cone-shaped cornea causes blurred vision and may cause sensitivity to light and glare. Keratoconus usually affects both eyes. Treatment options are glasses, RGP contact lenses, scleral contact lenses. collagen cross linking with riboflavin, and keratoplasty.

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Corneal Health

Other Factors: Conditions like glaucoma, diabetes, and other systemic diseases can also contribute to corneal diseases. The shortage of ophthalmologists, especially in rural areas, has increased avoidable blindness in India. Approximately 21 million diabetics in India have visual impairment problems.

*Eye Donation Theme 2024- "I Can See Clearly Now" Be the Light

Eye donation is a noble act that can significantly improve the quality of life for individuals suffering from corneal blindness. Eye donation involves the removal of the cornea from a deceased donor's eye. Cornea is the clear, dome-shaped surface that covers the front of the eye and plays a crucial role in focusing vision. Donated corneas can be transplanted to patients with corneal blindness, helping

them regain their sight. The process of eye donation is simple and can be done within 6-8 hours after death.

One person's cornea can be used for two blind people depending upon anterior or posterior corneal layer pathology (e.g. ALK, DALK, DSAEK, PDEK, and DMEK)

De novo pre-cut corneal tissue machinery availability for dissecting precise layer of corneal tissues reduced wastage of donor corneas.

Know about Eye Donation

- Eyes (Cornea) of any age, spectacle wearers, diabetics and hypertensive can donate their eyes after death.
- Eye donation has to be made within 6-8 hours after death.
- Eye (Cornea) donation is a very simple procedure & takes 15-20 minutes.
- An eye (Cornea) donation cannot be accepted when the deceased is known to have had AIDS, Hepatitis, Rabies and Syphilis as there are chances of the disease

Workshop held on Fire Safety Awareness in Hospitals



A workshop on "Fire Safety Awareness in Hospitals" was organized in Indus Hospital on 23rd August jointly by Indian Medical Association, Vizag and AP Fire Services. The training programme was inaugurated by Sri Madireddy Pratap, IPS, Director General of State Disaster Management & Fire Services, GoAP. Sri Pratap called upon the hospital managements for strict compliance of fire safety norms and stressed upon safety aspects of the in-patients especially on electrical hazards. Dr Sankabratha Bagchi, IPS, Police Commissioner, Visakhapatnam City present on the occasion.

From our hospital Sri NLK Sastry, Maintenance In-charge, Sri S Appalaraju, Asst Manager attended the conference.

Sankar Foundation organizes Eye Donation Rally

As part of Eye Donation fortnight campaign Sankar Foundation Eye Hospital conducted an eye donation rally from the hospital at Naidutita to Vepagunta to the hospital to create an awareness among the public about the eye donation.

The rally led by Dr Nasrin, HOD Cornea Department explained the importance of eye donation. Sri KV Venugopal, DGM (Operations), doctors, students, employees actively participated in the rally. They displayed play cards, slogans with banners highlighting the eye donation campaign.



Dr. Nasrin alongwith Doctors, Students, Employees at an Eye Donation Rally to create awareness among public

The Future of Eye Care : Emerging Trends in Ophthalmology

Dr NJ Sirisha, HOD,
Orbit & Oculoplasty



The Ophthalmology field is rapidly evolving with advancements in technology and research, aiming to improve patient outcomes and accessibility to eye care services. This blog highlights the latest advancements and innovations and role of Artificial Intelligence in providing quality eye care treatment.

One of the key trends is the integration of artificial intelligence (AI) and machine learning in diagnosing and treating eye conditions. AI algorithms can analyze medical images with high accuracy, assisting ophthalmologists in detecting diseases like diabetic retinopathy, glaucoma, and age-related macular degeneration at an early stage

Another significant trend is the development of minimally invasive surgical techniques. Procedures such as manual small-incision cataract surgery (MSICS) are becoming more popular, especially in developing regions, due to their cost-effectiveness and shorter recovery times MSICS offers advantages like a self-sealing suture less wound and requires less technology compared to traditional methods

The use of telemedicine is also on the rise, allowing patients to receive consultations and follow-ups remotely. This is particularly beneficial for those in rural or underserved areas, ensuring they have access to quality eye care without the need to travel long distances

Furthermore, there is a growing emphasis on research and innovation in eye care. Institutions are fostering a culture of research among staff and students, encouraging them to pursue projects that address community eye care needs. This includes the dissemination and application of research findings to improve the eye care delivery system and enhance patient outcomes.

In the dynamic field of eye care, change is not just a constant; it is the driving force propelling the industry toward a future where innovation and technology play pivotal roles. Ophthalmologists and optometrists are gearing up for transformative shifts in their practices, patient care approaches,



and business strategies. This blog explores the emerging trends that are set to reshape the landscape of ophthalmology, ensuring a vibrant and promising future for eye care professionals.

The Rise of Artificial Intelligence (AI)

One of the most significant trends poised to revolutionize ophthalmology is the integration of Artificial Intelligence (AI). AI technologies are gaining popularity for their applications in

screening, diagnosing, and treating various eye conditions. Devices utilizing AI can detect conditions such as diabetic retinopathy by analyzing retinal images, providing a rapid and accurate screening tool. AI excels in image recognition, enabling the differentiation between normal and abnormal images, thereby aiding in early diagnosis and intervention.

Moreover, AI-based software holds the potential to recognize early signs of conditions like macular degeneration. With efficient image assessment capabilities, AI can significantly speed up the diagnostic process, assisting ophthalmologists in detecting and treating macular degeneration at an early stage. The technology also proves valuable in mapping and measuring disease progression by processing large sets of information and multiple eye scans swiftly.

Bionic Eye Implants

A groundbreaking development in the quest to restore eyesight is the advent of bionic eye implants. Comparable to how cochlear implants revolutionized auditory disabilities, bionic eye implants aim to address visual impairments. These implants work within existing eye structures or directly in the brain, comprising components like the cornea, pupil, lens, retina, iris, and optical nerve. Unlike prosthetic eyes, bionic eyes focus on achieving functional vision goals, making them a disruptive technology in the realm of eye care.

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మాసపత్రిక ఆవిష్కరణ



మాసపత్రికను ఆవిష్కరిస్తున్న శంకర్ ఫౌండేషన్ ట్రస్ట్ కృష్ణకుమార్ తదితరులు

సింహాచలం : జీవీఎంసీ 98వ వార్షిక పరిధి నాయుడుతోటలో ఉన్న శంకర్ ఫౌండేషన్ కంటి ఆస్పత్రిలో ట్రస్టీ ఆత్మకూరి కృష్ణకుమార్ జాతీయ పతాకాన్ని ఆవిష్కరించారు. ఈ సందర్భంగా శంకర్ ఫౌండేషన్ నూతనంగా రూపొందించిన ఏజనరీ ఇన్ సైట్స్ మాసపత్రికను ఆవిష్కరించారు. వేడుకల్లో ఆస్పత్రి పారామెడికల్ విద్యార్థుల పరేడ్ ఆకట్టుకుంది. జీఎం కె.రాధాకృష్ణన్, శ్రీధర్ కె.కృష్ణప్రసాద్, డీజీఎంలు కె.బంగార్రాజు, వి.రమేష్ కుమార్, కె.వి. వేణుగోపాల్, జీఎం ఎస్ కేఎల్ రావు, వినోద్ కుమార్, డాక్టర్ రవీంద్ర, డాక్టర్ ఎన్.జె. శిరీష తదితరులు హాజరైనారు.

EDITOR - K Bangar Raju,
Dy GM (PR & Liaison)

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Dr T. Raveendra Elected to Glaucoma Society of India Executive Committee

Congratulations to Dr. T. Raveendra on being elected to the Executive Committee of the Glaucoma Society of India as the Southern region representative. Dr Raveendra currently is the Director, CQI & Research and HOD Glaucoma, Sankar Foundation. This honor reflects his dedication and contributions to glaucoma care.

This prestigious appointment is a testament to Dr. Raveendra's dedication, expertise, and significant contributions to the field of glaucoma research and treatment. His leadership and vision will undoubtedly inspire and drive progress within the society and beyond. Sankar Foundation wishing him continued success in his new role.



The Future of Eye Care

Synthetic Cornea Implants

In the future of eye care, synthetic cornea implants hold promise for those with diseased or damaged corneas. These implants feature an optical component attached to a biocompatible material resembling the human extracellular matrix. This material not only provides physical structure but also offers biochemical signals, facilitating fusion with nearby native tissues. As an alternative to traditional corneal transplants, synthetic cornea implants could address the scarcity of corneas for transplantation, offering a hopeful solution for patients in need.

overall efficiency and outcomes of eye surgeries.

The future of eye care is marked by transformative trends that promise to elevate the practice of ophthalmology to new heights. From the revolutionary impact of Artificial Intelligence in diagnosis and screening to the development of bionic eye implants and synthetic cornea implants, the industry is on the brink of a paradigm shift. Robotic surgical assistants are set to redefine the standards of precision in eye surgeries. Ophthalmologists and optometrists embracing these emerging trends are not just adapting to change; they are actively shaping the future of eye care, ensuring a brighter and more innovative path ahead. As these technologies continue to evolve, the potential for enhanced patient outcomes and advancements in visual restoration remains a beacon for the future of ophthalmology. Overall, the future of eye care looks bright with these emerging trends, promising better accessibility, improved patient outcomes, and continuous advancements in the field of ophthalmology.

Increase in Use of Robotic Surgical Assistants

Robotic surgical assistants are gaining prominence across various surgical specialties', and ophthalmology is no exception. The integration of robotics into ophthalmic procedures marks a significant advancement, promising improvements in operative precision, range of motion, and dexterity in confined spaces. These robotic assistants may also filter out tremors and manipulate multiple tools simultaneously, enhancing the