

AWARDS AND ACCOLADES



NEW ISO 9001:2015 CERTIFICATION

- **Sep 2024** Therapeutic Products Branch
- **Oct 2024** Innovation Office and Clinical Trials Branch
- **Nov 2024** Medical Devices Cluster



NEW ISO 17025 ACCREDITATION

- Biologics Laboratory has successfully attained ISO 17025 accreditation from SAC-SINGLAS in May 2024, one year after commencing operations in May 2023.
- This accreditation demonstrates the laboratory's commitment to technical excellence and expanding expertise, providing stakeholders with assured quality and integrity in testing services to safeguard public health and support Singapore's growing biologics sector.

Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ Future-ready People and Workforce
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

Our Work in Figures

Financial Highlights

SINGAPORE HEALTH QUALITY SERVICE AWARDS (SHQSA) 2025

29 outstanding individuals from various departments in HSA were presented with the Silver, Gold, and Star awards at the SHQSA Ceremony on 13 February 2025 at the University Cultural Centre for their exceptional service in the healthcare sector.

■ **3 STAR** ■ **20 Gold** ■ **6 Silver**



HSA OUTSTANDING SERVICE TO CUSTOMERS AWARD (OSCA) 2024

HSA staff who exemplified excellent customer service, were presented with awards during the Staff Forum in May 2025.

■ **7 GOLD AWARDS** ■ **18 SILVER AWARDS** ■ **32 BRONZE AWARDS** ■ **11 TEAM AWARDS**

NATIONAL VOLUNTEER & PHILANTHROPY CENTRE'S CHAMPION OF GOOD AWARD

- Recognises HSA's exemplary efforts in advancing its corporate purpose, inspiring others and demonstrating a strong commitment to make a positive impact.
- Played a pivotal role during the COVID-19 pandemic by ensuring timely access to essential health products, diagnostic test kits and vaccines.
- Reinforced Singapore's position as a global biomedical leader through science-based regulation, earning recognition as a WHO Stringent Regulatory Authority and attracting international pharmaceutical and biotechnology development to the country.



GROWING PARTNERSHIPS



MOU WITH VIETNAM METROLOGY INSTITUTE (VMI)

- Strengthened collaboration between HSA and VMI through knowledge exchange, joint research and the development of regional quality infrastructure.
- Facilitated VMI's participation in the Asia Pacific Metrology Programme's public health project.
- Formalises the shared vision for advancing scientific measurement and metrology in the Asia-Pacific region.



ASIAN FORENSIC SCIENCES NETWORK

- Re-elected as a Board Member for the term 2024 to 2026.
- HSA is represented by Dr Angeline Yap, Assistant Group Director, Forensic and Analytical Science.
- Nine of HSA's forensic experts assumed key leadership roles in various technical workgroups and committees.



WORLD HEALTH ORGANIZATION (WHO) COLLABORATING CENTRE

- Re-designated as a WHO Collaborating Centre for Transfusion Medicine from 2025 to 2028.
- Affirms HSA's expertise across all aspects of blood services, from donor management, blood supply management, laboratory services to clinical transfusion practices.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

► Awards and Accolades

► **Growing Partnerships**

► Digital Innovations

► Scientific Advancements

► Process Transformation

► Future-ready People and Workforce

► HSA Cares

► HSA Recycles and Sustains

► Staff Showcase

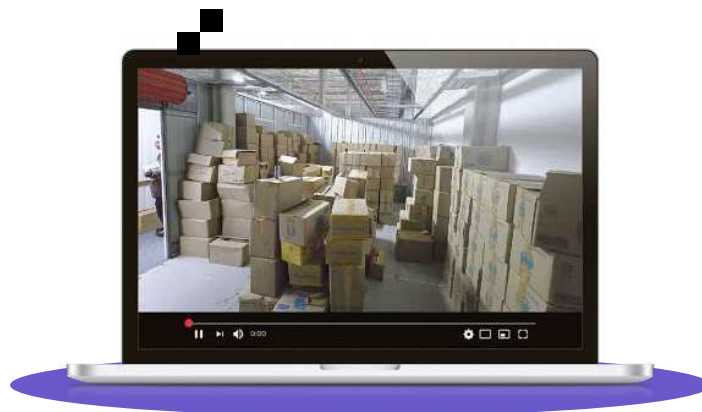
Our Work in Figures

Financial Highlights



HARMONISATION OF KINSHIP ANALYSIS FOR DISASTER VICTIM IDENTIFICATION (DVI)

- Partnered with the National Institute for Criminalistics and Criminology of Belgium and the University of Copenhagen to investigate inter-laboratory differences in kinship analysis practices among members of the INTERPOL DVI Genetic Sub-working Group.
- Facilitated the sharing of practices, knowledge and experiences of different jurisdictions, leading to constructive dialogue on the challenges in the conduct of kinship analysis for DVI.



MULTI-AGENCY PARTNERSHIP TO DISRUPT E-VAPORISER SUPPLY NETWORKS

- Worked with the Singapore Police Force (SPF), Criminal Investigation Department (CID) and Immigration and Checkpoints Authority (ICA) to disrupt one of the largest e-vaporiser distribution networks in Singapore.
- Over 750,000 e-vaporisers and components, worth more than \$11 million, were seized in April and June 2024.
- Major joint operation with the SPF led to the seizure of more than 600kg of smokeless tobacco, worth over \$100,000, and the arrest of 27 offenders.



HSA-SYNAPXE AI COLLABORATION FOR AI SOLUTIONS

- From late-2024 to 3rd quarter 2025, HSA and Synapxe collaboratively prototyped AI solutions to enhance the medical device evaluation process.
- AI was employed to analyse and identify gaps in supporting documents.
- Significantly reduces manual and repetitive tasks, enabling staff to focus on critical decision-making and higher-value work.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

► Awards and Accolades

► Growing Partnerships

► Digital Innovations

► Scientific Advancements

► Process Transformation

► Future-ready People and Workforce

► HSA Cares

► HSA Recycles and Sustains

► Staff Showcase

Our Work in Figures

Financial Highlights



HSA-MPA COLLABORATION

- Worked with Maritime & Port Authority of Singapore (MPA) to strengthen Singapore's capability in determining and regulating polymers in marine fuel oil, which is crucial for ensuring safety and efficiency of maritime operations.
- Leveraged complementary expertise of both agencies to address challenges in the maritime industry.



INTER-AGENCY TASKFORCE FOR CASE MANAGEMENT

- Partnered with Attorney-General's Chambers and Central Narcotics Bureau to formulate and implement policies related to the growing demand for forensic drug and DNA testing since June 2023.
- HSA's Illicit Drugs Division implemented 11 improvement initiatives to streamline its laboratory processes, saving approximately 1,000 man-days.
- Three additional initiatives were later developed by the Biology Division to offer a projected reduction of up to 30 days turn-around-time for drug trafficking cases.

Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ Future-ready People and Workforce
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

Our Work in Figures

Financial Highlights

DIGITAL INNOVATIONS



SINGAPORE HEALTH PRODUCT ACCESS REGULATORY E-SYSTEM (SHARE)

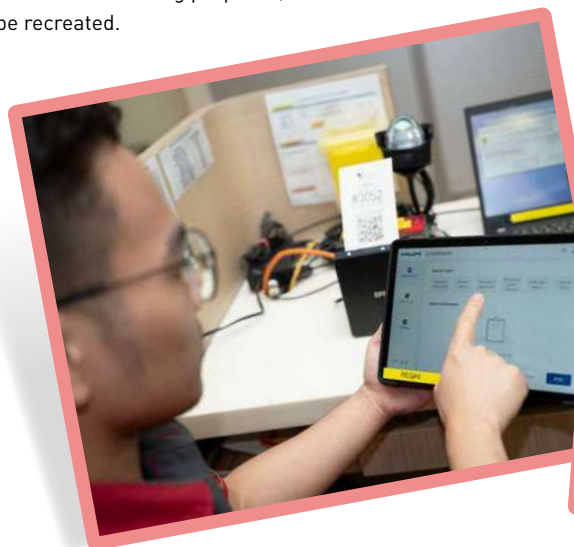
- New one-stop digital portal for handling Cell, Tissue and Gene Therapy Product (CTGTP) applications.
- Covers CTGTP Dealer's Notice, Licensing and Certification, as well as Class 1 CTGTP Notification and Class 2 CTGTP Registration.
- Enhances efficiency and transparency in processing submitted applications.

Search...



3D PRINTING TECHNOLOGY

- 3D printing technology enables the rapid fabrication of customised items by transforming digital 2D designs into functional 3D objects.
- Laboratories can print low-cost, customised laboratory tools that are otherwise too costly or unavailable commercially.
- Physical models of bones and evidence for explaining trauma and mode of injury to the police, as well as for teaching purposes, can also now be recreated.



NEW QUEUE MANAGEMENT SYSTEM

- New donor features include queue tracking using QR Codes and seamless modification of donation details.
- Enhanced analytic capabilities enable real-time tracking of queueing times, service delivery, and missed appointments across all Bloodbanks and more flexible administrative interface.

Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ Future-ready People and Workforce
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

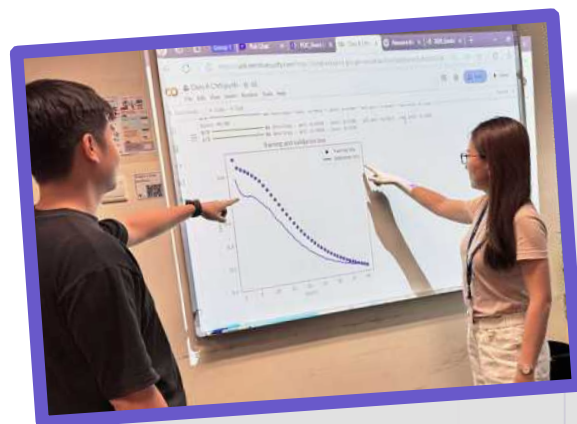
Our Work in Figures

Financial Highlights



INCREASED EFFICIENCY OF MOBILE BLOOD DRIVE OPERATIONS

- Implemented digital forms (FormSG) to capture various operations-related data of mobile blood drives and a hybrid data submission system to enhance reporting accuracy and operations.
- Enhancements allow Bloodbank staff to focus on providing quality donor service, reduce administrative burden, and enable better decision making.
- Since April 2024, 350 forms have been processed, saving close to 194 man-days annually.



AUTOMATED RISK CLASSIFICATION FOR MEDICAL DEVICES

- Implemented for Immediate Class B Route (IBR) Medical Devices.
- Employs machine learning algorithms and macro-enabled keyword detection to streamline the IBR medical device application verification process.



LEVERAGING ROBOTIC PROCESS AUTOMATION (RPA)

- RPA is used to automate the performance verification of lab instruments, verification of billing reports, scanning of journal websites, and other work processes.
- This helped to enhance work quality as manual errors were reduced and staff productivity was improved.
- Onboarded VITAL's Central RPA Platform to explore potential RPA use cases that require unattended bots, and UiPath's document understanding capabilities.



DRIVING AI ADOPTION IN HSA

- Developed a three-year AI roadmap to guide HSA's exploration of AI use cases to enhance work processes.



DATA GOVERNANCE AI BOT – DATAWIZ

- Launched in January 2025, DataWiz provides HSA staff with instant, reliable answers to common data governance questions, from data classification to sharing protocols.
- Fosters a culture of informed self-help and strengthens data governance awareness across HSA.



AI-POWERED HR ASSISTANT – MOMO

- MoMo serves as HSA's AI-powered HR assistant, designed to improve accessibility to HR information relating to pay, benefits and performance.
- Enhance staff's experience in navigating HR information by providing quick responses to staff queries.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

► Awards and Accolades

► Growing Partnerships

► Digital Innovations

► Scientific Advancements

► Process Transformation

► Future-ready People and Workforce

► HSA Cares

► HSA Recycles and Sustains

► Staff Showcase

Our Work in Figures

Financial Highlights

SCIENTIFIC ADVANCEMENTS



NEW MICROBIAL TESTING CAPABILITY

- Established microbial testing capability, which was accredited by SAC-SINGLAS in Q4 2024.
- Provides comprehensive solutions to support regulators in ensuring health product quality and safety standards in Singapore.



ALBUMIN IN URINE STANDARDISATION

- Contributed to the international standardisation programme for albumin in urine assays led by the National Institute of Diabetes and Digestive and Kidney Diseases and the International Federation of Clinical Chemistry and Laboratory Medicine.
- Co-organised a comparison to standardise reference measurement procedures for albumin in urine assays with the National Institute of Standards and Technology and the University of Minnesota.
- Developed the first and only Joint Committee for Traceability in Laboratory Medicine-approved albumin in urine certified reference material.
- Published results have led to the recommendation of new performance goals for in vitro diagnostic medical devices.
- HSA's Chemical Metrology Laboratory is one of the only three institutes capable of measuring albumin in urine using reference measurement procedures.



CITRININ DETECTION IN RED YEAST RICE PRODUCTS

- Implemented a highly sensitive test method for Citrinin determination using Quick, Easy, Cheap, Effective, Rugged, and Safe (QuEChERS) for sample clean-up and advanced Liquid Chromatography-Tandem Mass Spectrometry for Citrinin detection.
- Deployed in a market survey on Citrinin in locally marketed red yeast rice products.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

► Awards and Accolades

► Growing Partnerships

► Digital Innovations

► Scientific Advancements

► Process Transformation

► Future-ready People and Workforce

► HSA Cares

► HSA Recycles and Sustains

► Staff Showcase

Our Work in Figures

Financial Highlights

EVALUATION OF ACTIVITY-RELATED DNA TRANSFERS

- Developed a capability for evaluating hypotheses involving activity-related DNA transfers.
- Studies on shedder status and the persistence of DNA in the local environment improved the understanding of the relevance of DNA recovered from crime scenes.
- Performed research on the likelihood of DNA transfers between mock exhibits in personal bags, vehicles, and in a household setting to address plausible scenarios that may be raised in court.

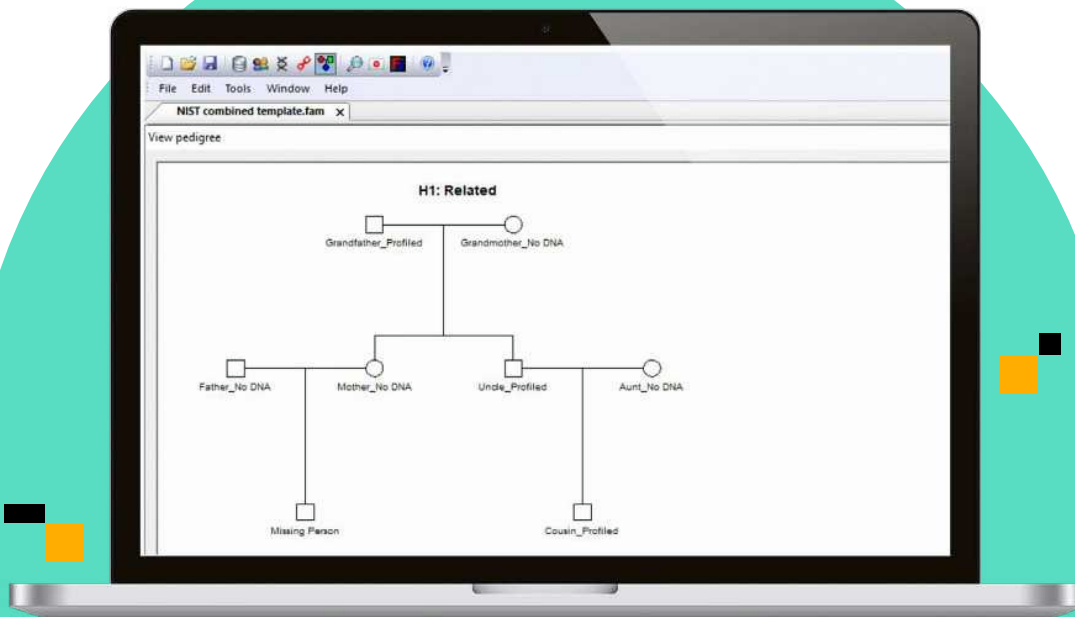
ENHANCED DECEASED IDENTIFICATION CAPABILITIES

- Implemented a new complex kinship statistics software which permits kinship determination using DNA from distant relatives when next-of-kin, such as parents, children or siblings, are not available.
- Better able to assist the Police and Coroner in identifying individuals whose bodily remains are fragmented or decomposed.



ENHANCED IDENTIFICATION CAPABILITY FOR EMERGING DRUGS OF ABUSE

- Liquid chromatograph coupled with high-resolution mass spectrometer was successfully validated for the structural elucidation and identification of emerging drugs of abuse.
- Enables identification of thermal labile drugs which are not suited for analysis using the routine gas chromatography-mass spectrometry method.



- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ Future-ready People and Workforce
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase



VEHICLE SPEED ANALYSIS WITH ADVANCED SENSOR SYSTEM

- Implemented a vehicle-mounted optical speed sensor system that replaces hand-held radar guns.
- New system features real-time continuous speed monitoring, consistent performance across diverse terrains and speeds, seamless vehicle system integration, and enhanced capabilities for evaluating current speed estimation methods.



KILLER CELL IMMUNOGLOBULIN-LIKE RECEPTOR (KIR) GENOTYPING

- Officially implemented KIR genotyping in February 2025 and received the first sample for testing the following month.
- New test assists clinicians in selecting the most suitable donors for haplo-identical haematopoietic stem cell transplants, in the absence of fully matched donors.



DRIVER'S 3D FIELD OF VIEW (FOV) ANALYSIS

- 95% reduction of on-site man-hours through elimination of manual FOV mapping.
- Improves accuracy by reducing human error and subjectivity through capturing precise driver's eye position and vehicle geometry coordinates.
- Enhances staff welfare by minimising staff exposure to adverse weather conditions.



PROCESS TRANSFORMATION



SEARCH AND INFORMATION RETRIEVAL TOOL

- Developed under GOVTECH's Launch! AI Incubator Programme.
- The tool employs large language models in combination with a retrieval augmented generation architecture to simplify and broaden the scope of regulatory investigations.
- Received SuperStar Builders Award from Amazon Web Services (AWS) for our Search and Information Retrieval Tool of Package Inserts of Medicines initiative.
- The team is working towards developing the tool's proof-of-value before it can be scaled and hosted on a secure, cloud-based environment for widespread use.



AUTOMATED SOLID PHASE EXTRACTION (SPE) SYSTEM

- Implemented a fully automated SPE system for extraction of natural alkaloids from complementary health products.
- SPE can process over 50 samples autonomously, as well as simultaneously handle four samples in 30 minutes, with annual savings of approximately 60 man-hours.
- Lab productivity and staff morale have been enhanced.



AUTOMATED SAMPLE PREPARATION

- Introduced automated sample preparation for the analysis of new psychoactive substances in urine.
- Full automation of process including enzyme hydrolysis, sample extraction, elution, and reconstitution for instrumental analysis, resulting in annual savings of approximately 364 man-hours.
- The man-hours savings allow the lab to handle increasing sample testing volumes without additional manpower resources.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

► Awards and Accolades

► Growing Partnerships

► Digital Innovations

► Scientific Advancements

► **Process Transformation**

► Future-ready People and Workforce

► HSA Cares

► HSA Recycles and Sustains

► Staff Showcase

Our Work in Figures

Financial Highlights



NEXT-GEN BLOOD SUPPLY MANAGEMENT SYSTEM (NBSM)

- Implemented NBSM, a web-based blood ordering and inventory system, across all public hospitals, to enhance patient safety, raise productivity, and provide better visualisation of blood inventory.
- New Phase Jitter Modulation (PJM) high frequency Radio-Frequency Identification (RFID) labelling of each blood product allows for real-time location tracking of inventory, as well as better management of stock management.
- Digitalised workflow replaces traditional processes, thereby improving operational efficiency and accuracy.



IMPLEMENTATION OF RESTRAINING PATENT

- Published information detailing the scope of patents and the patent declaration process under the revised Regulation 23 to provide the necessary clarity.
- Facilitates registration applications and minimises indiscriminate use of the mechanism under Regulation 23 of Health Products Regulations 2016.



ENHANCING REGULATORY WORKFLOWS THROUGH AI AND AUTOMATION

- Built a Python search tool to facilitate efficient retrieval of past case information for product classification.
- Optimised processing of Voluntary Notification System (VNS) applications and document submissions.
- Developed AIBots to draft replies to consumers and industry stakeholders using existing regulatory guidelines and advisories.



VIRTUAL QUALITY MANAGER

- Successfully developed and implemented ChatQM, an internal chatbot that assists staff with quality-related queries and document management.
- Utilises GovTech's AIBots platform to provide instant standard operating procedure clarification, text improvement suggestions for enhanced clarity of documents, and inter-dependency analysis.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ **Process Transformation**
- ▶ Future-ready People and Workforce
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

Our Work in Figures

Financial Highlights

FUTURE-READY PEOPLE AND WORKFORCE

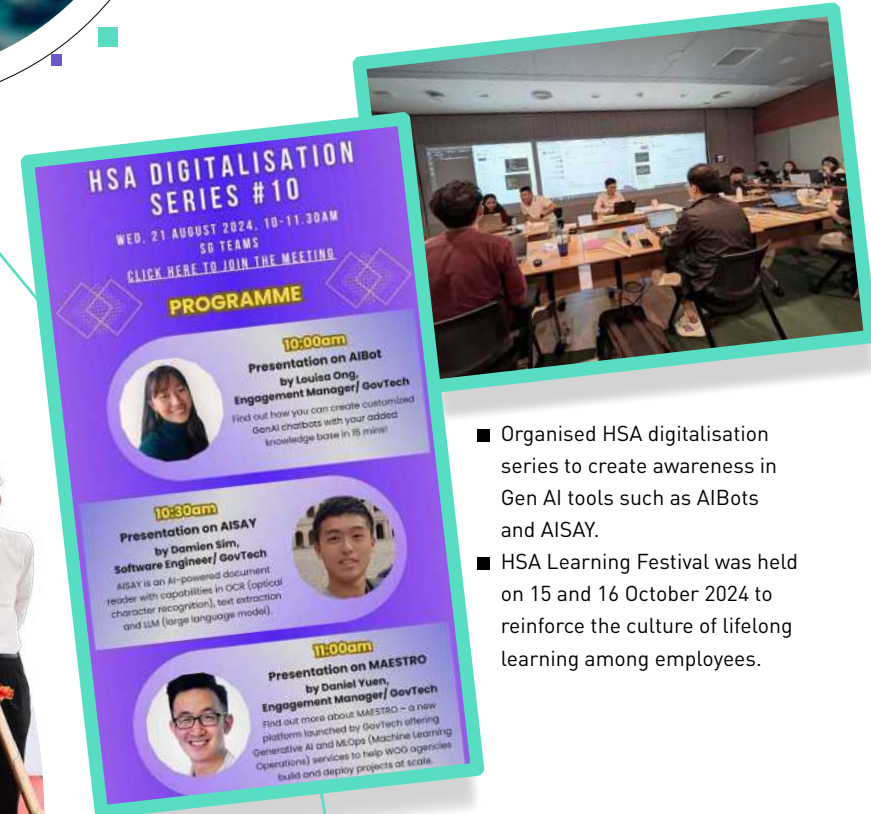
BUILDING TOMORROW'S HSA

- The groundbreaking ceremony was held in October 2024, celebrating the start of construction of the new HSA building.
- Comprising a 13-storey office tower and nine-storey laboratory complex, it will unite all operations in an integrated facility.
- State-of-the-art scientific facilities and modern infrastructure will enhance our operational capabilities and service delivery.
- Drawing from our experiences during COVID-19, the building incorporates enhanced pandemic-resilient features, while meeting the Green Mark Platinum certification.



PROFESSIONAL DEVELOPMENT IN AI AND DATA SYSTEMS

- Participated in multiple GovTech-led workshops on topics such as large language models.
- Built up experience in Retrieval-Augmented Generation (RAG) systems through expert coaching and practical training sessions.
- Strengthened prompt engineering expertise through intensive preparation for Prompt Royale X (PRx@HSA 2024), the inaugural tournament designed to raise awareness of generative AI capabilities and advance prompt engineering excellence across the agency.



- Organised HSA digitalisation series to create awareness in Gen AI tools such as AIBots and AISAY.
- HSA Learning Festival was held on 15 and 16 October 2024 to reinforce the culture of lifelong learning among employees.

Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ **Future-ready People and Workforce**
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

Our Work in Figures

Financial Highlights



HSA FORENSIC ODONTOLOGY SCHOLARSHIP

- Dr Meng Haoyuan became the second dental trainee to be awarded a scholarship for the MSc Forensic Dentistry programme at the University of Dundee, United Kingdom.



DISASTER VICTIM IDENTIFICATION (DVI) FOR DENTISTS

- Conducted inaugural Disaster Victim Identification (DVI) training course for non-forensic dentists.
- Trained seven dentists to support mass fatality incident response in Singapore.



TOP 250 BEST EMPLOYERS 2025

- Recognised as one of Singapore's Best Employers in a survey conducted by Statista in partnership with The Straits Times.
- Reflects our dedication to:
 - Fostering excellence in the workplace
 - Enabling our employees to protect and advance national health and safety
 - Serving our community better

Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ **Future-ready People and Workforce**
- ▶ HSA Cares
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

Our Work in Figures

Financial Highlights

HSA CARES

HAIR FOR HOPE

- Collaborated with the Ministry of Health (MOH) and Health Promotion Board (HPB) to organise the 4th Hair for Hope satellite event at HSA Outram in May 2024.
- 25 volunteers from HSA, MOH and HPB shaved their heads to show their support to children battling cancer.
- More than \$58,000 was raised for the Children's Cancer Foundation.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- ▶ Awards and Accolades
- ▶ Growing Partnerships
- ▶ Digital Innovations
- ▶ Scientific Advancements
- ▶ Process Transformation
- ▶ Future-ready People and Workforce
- ▶ **HSA Cares**
- ▶ HSA Recycles and Sustains
- ▶ Staff Showcase

Our Work in Figures

Financial Highlights

- Awards and Accolades
- Growing Partnerships
- Digital Innovations
- Scientific Advancements
- Process Transformation
- Future-ready People and Workforce
- **HSA Cares**
- HSA Recycles and Sustains
- Staff Showcase

HSA TEAM SHINES IN CANCER FUNDRAISING RELAY CHALLENGE

- 40 HSA staff joined the MOH family in the Relay for Life 100KM challenge from 8 to 9 March 2025.
- Achieved a total distance of 366.4 km, doubling our previous year's record.
- Successfully raised over \$29,000 for the Singapore Cancer Society to support various cancer-related services including screenings, welfare aid, and palliative care.



HSA RECYCLES AND SUSTAINS

BISHAN-ANG MO KIO PARK CLEAN-UP

- 34 volunteers consisting of HSA staff and their families gathered in July 2024 to clean up Bishan-Ang Mo Kio Park.
- This was in support of the SG Clean Day movement to promote environmental stewardship in public spaces.



Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- Awards and Accolades
- Growing Partnerships
- Digital Innovations
- Scientific Advancements
- Process Transformation
- Future-ready People and Workforce
- HSA Cares
- **HSA Recycles and Sustains**
- Staff Showcase

Our Work in Figures

Financial Highlights

STAFF SHOWCASE

Chairman's Message

CEO's Message

Board Members

HSA at a Glance

- Awards and Accolades
- Growing Partnerships
- Digital Innovations
- Scientific Advancements
- Process Transformation
- Future-ready People and Workforce
- HSA Cares
- HSA Recycles and Sustain
- **Staff Showcase**

Our Work in Figures

Financial Highlights

“

Transformative solutions begin with understanding tomorrow's needs today. The Advanced Contactless Evidence Submission/Collection System (ACCESS) represents HSA's commitment to innovation in public service delivery. By reimagining evidence management for the digital age, we have created a new standard for operational excellence in forensic services. This system, developed through close collaboration with our stakeholders, demonstrates how we can harness technology to enhance both efficiency and reliability in our critical work. ”



Moy Hooi Yan

Laboratory Director
Analytical Toxicology Division,
Applied Sciences Group

“

A vibrant workplace culture is built on trust, open dialogue, and the courage to challenge conventions. By fostering an environment where teams feel empowered to challenge conventions and explore new solutions, we have achieved significant milestones. This includes creating HSA's first digital workplan portal. This approach has not only enhanced our efficiency but has also strengthened the bonds within our teams, proving that the best solutions often emerge when we create space for both professional growth and personal connections. ”



Gabriel Yeo

Director
Strategy and Business
Transformation,
Corporate Services Group

“

In health products regulation, excellence means staying ahead of the curve. Through the Digital-All-in-one System (DASH) MVP, we have demonstrated how emerging technologies can enhance regulatory processes while maintaining the highest standards of safety and quality. Our AI-powered medical device classification tool, built on verified data, exemplifies this approach—harnessing machine learning to provide instant, reliable guidance. This is how we are building a smarter, more responsive regulatory environment that serves our stakeholders better. ”



Wong Woei Jiuang

Assistant Group Director
Medical Devices Cluster,
Health Products Regulation Group