



“No one knew if I would wake up.”

A year ago, Ms Lee was admitted to hospital due to a severe brain infection and subsequently fell into coma. However, with the quick action and expert care of the medical team, she made a full recovery and is now back to work again.

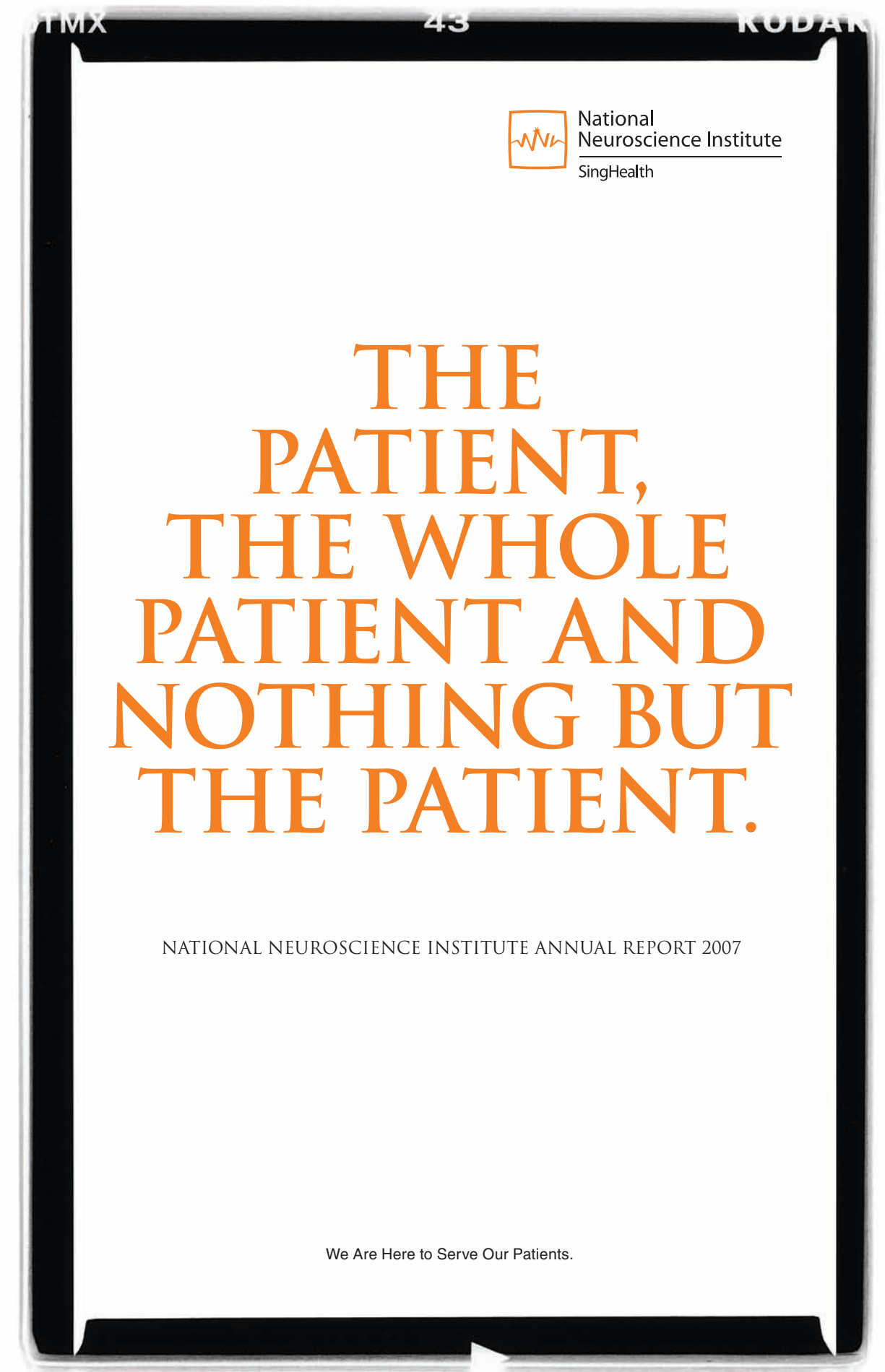
Ms Margina Lee, 50
Brain infection patient, NNI



“My head almost killed me.”

Mdm Ong was diagnosed with Meningioma (brain tumour) and underwent neurosurgery at NNI. With strong support from family and friends, and care received from a multi-disciplinary team, she was able to concentrate on her recovery.

Mdm Ong Siew Bee, 59
Brain tumour patient, NNI



**THE
PATIENT,
THE WHOLE
PATIENT AND
NOTHING BUT
THE PATIENT.**

NATIONAL NEUROSCIENCE INSTITUTE ANNUAL REPORT 2007

We Are Here to Serve Our Patients.

“ The NNI continues to strive for excellence in the provision of neurological, neurosurgical and neuroradiological care for Singapore and the region. Our priority lies in delivering the best clinical outcomes for our patients, ensuring their safety and providing co-ordinated and holistic care. ”

Professor Lee Wei Ling
Director, National Neuroscience Institute

HIGHLIGHTS

APRIL 2007

Mechanical embolectomy for treatment of acute ischemic stroke was introduced as an alternative strategy in opening intracranial vessels during stroke for patients, who are otherwise ineligible for thrombolytics.

OCTOBER 2007

Launch of Community Care Partners Programme (CCPP) – Singapore’s first-ever organised outreach programme aimed at enhancing the delivery of care and support for the Parkinson’s community.

NOVEMBER 2007

Intelligent Treatment Framework@Khoo Teck Puat-National Neuroscience Institute (KTP-NNI) Integrated Neuroscience Centre – three fully integrated workflow-optimised operating rooms that combine image-guided surgery and intra-operative imaging and data management technology.

Ms Margina Lee, 50, was hospitalised with a severe brain infection that left her comatose. “I don’t remember much of my stay, but thanks to the quick actions and expert care of the doctors and medical staff, I was able to make a full recovery,” relives a grateful Ms Lee. She was one of many patients who had benefited from National Neuroscience Institute (NNI) continuing to extend its services into the community, partnering other hospitals and specialist care organisations, and harnessing technology to bring care and improvement to patients with neurological conditions.

NNI continues to build on its expertise in neuroscience with the addition of new services and

programmes, and strong partnerships formed to reinforce its commitment to providing excellence in patient care, medical education and research.

The Department of Neurology at NNI’s Tan Tock Seng campus has extended its services to Alexandra Hospital (AH), in addition to its existing services at Changi General Hospital (CGH) and Tan Tock Seng Hospital (TTSH). Such accessibility helps patients like Ms Margina Lee gain quick access to care.

In a further collaborative community partnership, the Community Care Partners Programme (CCPP) was introduced in October 2007 to improve the delivery of co-ordinated multi-disciplinary care and support workers in the community who are managing patients with Parkinson’s Disease.

The opening of the KTP-NNI Integrated Neuroscience Centre at Singapore General Hospital (SGH) has opened doors to new areas of acute patient care. It is now also the reference centre for the “Intelligent Treatment Framework”, comprising the BrainSuite@iMRI, BrainSUITE iCT and Fluoro 3D, three fully integrated workflow-optimised operating rooms that combine image-guided surgery and intra-operative imaging and data management technology. This comprehensive, digitally integrated facility delivers all-in-one patient care, from diagnostics through to treatment, providing clinicians with effective access and improved management of digital medical information. This results in better informed medical decisions and a seamless combination of multiple treatments for the patient.

Being at the forefront of the latest advances in technology is what saves lives. Mdm Rosa Lee,

AWARDS & ACCOLADES

Research
Biomedical Research Council Grant
Dr Lim Kah Leong
Dr Carol Tang

SingHealth Foundation Research Grant
Dr Lim Kah Leong

53, underwent surgery by a team of NNI doctors at TTSH. Rushed to the A&E after experiencing giddiness, she was diagnosed with a ruptured aneurysm and underwent surgery within a day. “Thanks to the quick work of the doctors at NNI, I was able to make a near perfect recovery,” explains Mdm Lee.

Further enhancements including the addition of the mechanical service embolectomy to the Acute Thrombolysis service were introduced in 2007. This service now provides an alternative strategy for opening intracranial vessels during a stroke, especially in patients ineligible for intravenous tissue plasminogen activator (tPA), which is given intravenously within three hours of symptom onset.

Harnessing the advances in teleradiology, the Department of Neuroradiology has enhanced its diagnostic and neuroradiology services, greatly reducing patient waiting times. Patient care will not be compromised during emergencies as the team of doctors can continue with remote and urgent radiological reporting and consultation from home via Virtual Private Network (VPN) access.

The NNI works closely with its partners, regional colleagues and other leading experts to organise training, regular scientific updates and conferences that are instrumental in bringing the best neurological care to its patients and in the region. In addition, overseas attachments to hospitals allow NNI’s doctors greater opportunity for research and advances in their fields of expertise.

Their research is the building block of care for patients of tomorrow. In a study led by Associate

FINANCIALS **FY07** **FY06**

Workload per annum		
Specialist Outpatient Clinic Attendances	37,933	38,896
Staffing (as at end March)		
Total	211	205
Doctors	93	89
Nurses	14	15
Allied Health Professionals	31	30
Others	73	71

Professor Tan Eng King and Dr Louis Tan of the NNI, and Dr Koh Woon Puay, an assistant professor from the Yong Loo Lin School of Medicine, National University of Singapore, drinking black tea was found to prevent the onset of Parkinson’s disease.

In further research on the disease, a novel fruit fly model of Parkinson’s disease led by Dr Lim Kah Leong’s Neurodegeneration Research Laboratory, in collaboration with investigators at the Temasek Life Sciences Laboratory, was published in a leading neuroscience journal. The paper is one of the first to provide an in vivo demonstration that certain parkin mutations could exert dominant effects. The findings help to explain why individuals hit by single parkin mutation are at risk of developing Parkinson’s disease.

It is with the combination of training, enhanced technology and research, that patients undergoing neurosurgery can now look forward to safer and faster procedures with greater precision at NNI. Mdm Ong Siew Bee, 59, inspired the staff who cared for her. Diagnosed with a brain tumour, she concentrated on positive thoughts when faced with neurosurgery. Today an outpatient, Mdm Ong speaks highly of the care and treatment received from NNI’s multi-disciplinary team, in particular her neurosurgeon, Dr Ng WH. “He was an enormous help and a pillar of support along with my family and friends,” she recalls. It is patients, such as Mdm Ong, that drives NNI to take the lead in cutting-edge research and to invest in state-of-the-art technology to continually enhance the services and treatments it can bring to all its patients.



“Why stew over bad luck when you can whip up something good?”

Rushed to A&E after collapsing, Mdm Lee received timely emergency embolisation surgery. This cheerful mother of two boys today requires close supervision from her family due to a high tendency to fall. However, this does not prevent her from going about her daily routine as normal.

Mdm Rosa Lee, 53
Ruptured aneurysm patient, NNI