HIGHLIGHTS

11 MEDALS AT THE INTER-TERTIARY CANOEING CHAMPIONSHIPS 2016

The high-speed sport of canoe-sprinting is often referred to as the Formula 1 of water sports. The aim of the Inter-Tertiary Canoeing Championships (ITCC) is to provide an opportunity for canoeists in tertiary institutions in Singapore to participate in competitions catered specifically to them. At the ITCC on 19 March 2016, NYP’s women canoeists clinched five silvers and six bronze medals.

FOCUS ON INDUSTRY

NYP prides itself on providing quality, industry-relevant polytechnic education. It has distinguished itself by implementing a contextual teaching and learning concept to train technologists, relentlessly pursuing new innovations to meet the needs of a changing economy, working closely with industry, and focusing on developing new capabilities. Over the years, NYP has collaborated with a large network of partners, forging strong relationships and leveraging on each other’s resources, expertise and capabilities. These partners include industry and technology leaders, educational and research institutions, and economic and development agencies – both local and international. In FY2015, the various schools in NYP introduced key initiatives and new developments, set up new facilities, inked numerous memoranda of understanding (MOUs), and won many important industry projects.
FOCUS ON INDUSTRY

SCHOOL OF BUSINESS MANAGEMENT (SBM)

NEW TEACHING ENTERPRISE CENTRES

In AY2015, new Teaching Enterprise Project facilities were set up to provide realistic, relevant and industry-based training for final year students from SBM. These facilities included the Productivity Training Centre, Marketing Services Centre (comprising D'Studio, Connect'on and Cheers), Media Hub & Production Studio, and BodyWatch Gym.

РЕTAIL SECTOR COORDINATION TEAM MOU SIGNING

Led by NYP, a group of five polytechnics and the Institute of Technical Education (ITE) signed MOUs with 16 retail companies for the implementation of SkillsFuture initiatives. Mr Ong Ye Kung, Acting Minister for Education (Higher Education and Skills), witnessed the MOU signing ceremony for the retail sector, held on 26 January 2016.

Diploma in Mass Media Management (DMMM) students at the Media Hub & Production Studio, which opened on 6 January 2016

Mr Ong Ye Kung (far left) interacting with students from the polytechnics and ITE after the MOU signing ceremony

DMMM lecturer and students in the midst of filming Singapore’s 50th Anniversary Celebration at the 2015 National Day Parade in August

VIDEO PRODUCTION FOR PROMINENT EVENTS IN SINGAPORE

Students from DMMM were involved in filming and video production for high-profile events such as the 2015 Formula 1 Singapore Airlines Singapore Grand Prix and the 2015 National Day Parade.

Chairman of NYP’s Board of Governors Mr Tan Tong Hai (third from left) showing a product at the official opening of the Marketing Services Centre on 23 June 2015

Key Initiatives
1. Enhanced Internship Programme
2. NYP-ACCA Accelerated Professional Pathway Scheme (for Diploma in Accountancy & Finance students)

MOUs (Overseas Student Exchange Programme Partner Universities)
1. California State University, Long Beach, USA
2. FHS St. Gallen, Switzerland
3. Kookmin University, South Korea
4. Middlesex University, UK
5. Rangsit University, Thailand
6. San Diego State University, USA
7. University of Seoul, South Korea
8. University of Sunderland, UK

MOUs (Industry)
1. Accounting and Corporate Regulatory Authority (ACRA)
2. FOX International Channels
3. InterContinental Hotels Group
4. Olympus Imaging Singapore
5. Singapore Sports Institute

Industry Projects
2. Examinations Process Review Project for The Institute of Banking and Finance Singapore
3. Housekeeping and Front Office Productivity Study for AccorHotels
4. Mystery Shopping Programme for Extra Space Singapore Holdings
5. Mystery Shopping Programme for Sheng Siong Supermarket
6. Post Programme Evaluation for Army Recruitment Centre
7. Project on Analysing and Reporting Survey Responses from Employers to Determine Training Impact on Business for Singapore Institute of Retail Studies
8. Provision of Retail Banking Related Services to OCBC Bank, NTU Branch
9. Video Productions for SMBC Singapore Open and HSBC Women’s Champions
FOCUS ON INDUSTRY

SCHOOL OF CHEMICAL & LIFE SCIENCES (SCL)

RESEARCH INNOVATIONS PATENTED

Patents were successfully filed for two innovations by SCL lecturers. On 10 March 2016, the patent for “Sample Preparation Method for MALDI-ToF Mass Spectrometry” towards rapid identification of food bacteria was filed by Ms Catherine Seah, Dr Mathew Lau and Ms Liew Tze Horng. Separately, Dr Saji George and Ms Ignacius Tay filed the patent for antimicrobial composition and preparation methods on 23 March 2016.

RESEARCH INNOVATIONS PATENTED

In March 2016, SCL signed MOUs with Lonza Biologics Tuas Pte Ltd and Baxalta Manufacturing SARL, Singapore Branch to formalise the partnership and commitment in NYP’s Enhanced Internship Programme (EIP) on biologics manufacturing. This follows a successful pilot run of the EIP with GSK Biologics and Novartis BioPharMops Singapore, where seven in 10 students not heading for national service were offered employment before graduation.

SCL LECTURERS WIN AWARDS FOR INNOVATIVE FISH VACCINES

SCL senior lecturers Dr Jeffrey Seng, Dr Saji George and Mr Christof Luda won two prestigious awards for developing effective autogenous fish vaccines and a novel nanotechnology-based vaccine delivery system. The project scooped up the “Most Innovative Project/Policy (Gold)” award at both the PS21 ExCEL Awards and MOE Innergy (Stat Board) Awards. Dr Seng also won the PS21 Innovation Champion (Silver) Award.

SCL SUCCESSFULLY EXPANDS SKILLSFUTURE EIP

Key Initiatives & New Developments
1. Appointment of NYP as Programme Lead by Workforce Development Agency for Earn and Learn Programme – Advanced Diploma in Pharmaceutical Sciences
2. Launch of Workforce Skills Qualifications Culinary Course

MOUs (Universities & Educational Institutions)
1. Macquarie University, Australia
2. Suwon Women’s University, South Korea
3. Technological and Higher Education Institute of Hong Kong
4. University of Yangon, Myanmar
5. Zurich University of Applied Sciences, Switzerland

MOUs (Industry)
1. 3M Technologies Pte Ltd
2. Agri-Food and Veterinary Authority of Singapore
3. Baxalta Manufacturing SARL, Singapore Branch
4. Health Promotion Board
5. Institute of Molecular and Cell Biology
6. Lonza Biologics Tuas Pte Ltd (Joint MOU with SCL & SEG)
7. Pfizer Asia Pacific Pte Ltd
8. ProXES Asia Pacific Pte Ltd
9. Pure Orient Global Ltd
10. Quest Laboratories Pte Ltd
11. SP-Asia Pte Ltd
12. TÜV SÜD PSB Pte Ltd
13. Zingrill Holdings Pte Ltd

Industry Projects
1. Analysis of Activated Nuts for Suppliative Foods Pte Ltd
2. Development of a Cordycep Nutraceutical for LINK TMX Sciences
3. Development of a Nano-hair Dye Formulation for MASE International Marketing Services Pte Ltd
4. Development of Herbal Beverages for Pure Orient Global Ltd
5. Evaluating the Fate and Safety of a Fish Vaccine Composition Containing Nanomaterials for UVAxx Pte Ltd
7. Sensory and Consumer Testing of Commercial Products for ABR Holdings Ltd
8. Shelf Life and Sensory Evaluation of Nut Butter for Hunters Bar Pte Ltd
9. Systematic Identification of Fish Pathogen for Rapid Vaccine Prototyping and Development of a Novel Vaccine Delivery System for UVAxx Pte Ltd
10. Verification of Shelf Life at Different Storage for Lim Kew Food Manufacturing Pte Ltd
FOCUS ON INDUSTRY

SCHOOL OF DESIGN (SDN)

SDN students from all three diplomas were involved in designing and creating the sets for one zone at Halloween Horror Nights 2015, which was held in October 2015. Following this successful work, SDN is again involved on the 2016 edition, with some students continuing to work on the project as interns. Work started in January 2016, and this is one of the many integrated projects involving SDN students from more than one diploma course.

HALLOWEEN HORROR NIGHTS 2015 & 2016

A group of 13 SDN students, led by a lecturer, collaborated with the Urban Redevelopment Authority and architectural firm Zarch to create an interactive installation titled “Clockwork Stories” for i Light Marina Bay held in March 2016. Many families with children flocked to the SDN team’s installation, as they could relate to the traditional playground equipment. When used, the equipment produced bubbles that reflected the ambient lights and colours. Featuring environmentally sustainable light art installations, i Light Marina Bay attracted 740,000 visitors.

i LIGHT MARINA BAY 2016

SDN has secured a generous sponsorship from ONG&ONG, a global multidisciplinary design practice, to support the development of concepts and ideas into market-ready products. It will complement SDN’s training process by exposing its students to the development cycle of real commercial products. A formal agreement was signed at the UNIT16 Graduation Show on 10 March 2016. This is ONG&ONG’s first collaboration with an educational institution.

TURNING IDEAS INTO REALITY

OTHER COLLABORATIONS

Key Initiatives & New Developments
1. Appointment by MOE as Sector Coordinator for Design
2. Appointment by WDA as Programme Manager for Spatial Design
3. Appointment by WDA as Programme Manager for Visual Communication
4. Commencement of Operations at Block N1 Level 8
5. Commencement of Specialist Diploma in Design Strategy and Management

MOUs (Industry)
1. ONG&ONG Group

Industry Projects
1. Design Proposals for Greenlam Laminates
2. Graphics for the 16 Skytrains Plying the Changi Airport Terminals
3. Proposal to SATS for a Multipurpose Meal Tray
4. Worked on Office Interior Design, Corporate Identity and Mascot for Social Innovation Park Ltd
SCHOOL OF ENGINEERING (SEG)

NYP–GANSTAR INNOVATION CENTRE

The collaboration is the first of its kind in Singapore, integrating GaN research outcomes from A*STAR’s Institute of Materials Research and Engineering (IMRE) with silicon wafer processing technologies from Nanyang Technological University.

MOUs (Universities & Educational Institutions)
1. National Institute of Technology, Karaszu, College, Japan
2. National Institute of Technology, Kurume College, Japan

MOUs (Industry)
1. American-Built Far East Inc.
2. B&R Automation Pte Ltd
3. Becca Asia Holdings Pte Ltd
4. Section Dickinson Medical Products Pte Ltd
5. CIBA Vision Asian Manufacturing and Logistics Pte Ltd & Alcon Singapore Manufacturing Pte Ltd
6. Cyclacit Electrical Engineering Pte Ltd
7. Delphi Automotive Systems Singapore Pte Ltd
8. Electronics & Engineering Pte Ltd
9. Ellitipiz DSI Pte Ltd
10. Festo Singapore Pte Ltd
11. Fluidigm Singapore Pte Ltd
12. Fluke South East Asia Pte Ltd
13. Hexagon Solution Pte Ltd
14. JEP Precision Engineering Pte Ltd
15. Keycom Cable (S) Pte Ltd
16. Litewell Engineering Pte Ltd
17. Lenovo Biologics Tuas Pte Ltd (Joint MOU with SGL, SEG)
18. Makino Asia Pte Ltd
19. Meaden Singapore Pte Ltd
20. Microsoft (Smart Devices & IoT Solution)
21. Ministry of Defence
22. Ministry of Social and Family Development
23. Mitsubishi Electric Asia Pte Ltd
24. MVTec Software GmbH
25. Panasonic Factory Solutions Asia Pacific Pte Ltd
26. Power Automation Pte Ltd
27. PISA Corporation Ltd
28. PSB Technologies Pte Ltd
29. Razer (Asia-Pacific) Pte Ltd
30. Renewpower Technologies Pte Ltd
31. Sanmina SCI Systems Singapore Pte Ltd
32. SANWA Group of Companies
33. SBS Transit Ltd
34. Sembcorp Design and Construction Pte Ltd
35. Satcoo Services Pte Ltd
36. SICK Product Center Asia Pte Ltd
37. Singapore Power Ltd
38. Singapore Safety Glass Pte Ltd
39. SHEV Motors Pte Ltd
40. SMART Corporation Ltd
41. Sokkia Co., Ltd
42. SP-Avia Pte Ltd
43. Syntecmic Asia-Pacific Pte Ltd
44. System Techic Engineering Pte Ltd
45. Systems on Silicon Manufacturing Company Pte Ltd (SSMC)
46. TDS Technology (S) Pte Ltd
47. Terasaki Electric Co. (FE) Pte Ltd
48. Tuas Power Generation Pte Ltd
49. UG M&E Pte Ltd
50. Univar Precision Engineering Pte Ltd
51. VOLL Enabling Technologies Group Singapore Pte Ltd
52. Vistaxa Pte Ltd
53. Workforce Development Agency (Advanced Manufacturing)
54. Yokogawa Electric Asia Pte Ltd
55. YTL PowerSarasini Pte Limited

Industry Projects
1. Additive Manufacturing of Cavity Conformal Cooling Insert for Additive Mfg Pte Ltd
2. Additive Manufacturing of Conformal Cooling Insert using DMLS Process for Additive Mfg Pte Ltd
3. Air Quality Monitoring System for Innovation.Generous (IN.GENIUS) Pte Ltd
4. ALD Coating on 3D Polymer for IMRE
5. ALD Coating of TiO2 on 3D Polymer for IMRE
6. Automated Blistter Inspection System for TNC Optics & Technologies Pte Ltd
7. Automated Socket Handling Station and WIP for Sanwa-Intec (Asia) Pte Ltd
8. Automatic Hardover Control for Wireless Networking for Koobatra Pte Ltd
9. Automation of PODS Sensor Manufacturing System for Shimano (Singapore) Pte Ltd
10. Cable Car Command Centre Monitoring Software for Citrine Solution Pte Ltd
11. Cash Top-up Kiosk System for Bev.Eat Pte Ltd
12. Cashless Donation Can for NETS Pte Ltd
13. Comparison and Correlation of Electromyographical ECG Signals for H.E.S. Pte Ltd
15. Conformal Cooling Insert Using DMLS Process for Shimano (Singapore) Pte Ltd
16. Cosinimplant Implant Moulds and Skull Prototypes for Khoo Teck Puat Hospital
17. Design and Development of Tooling Insert for Dynaxail Singapore Pte Ltd
18. Embedded Multimedia Platform for rodVENTURE
20. Interactive Device for Dementia Patients for Rockis App Solutions
21. Metal Oxide Nanofilm Coating for Energy Storage for National University of Singapore
22. Mobile App and Web Portal Development for Institute for Infocomm Research
23. Modular Light Dusting System for JM Singapore
25. Omron Eye Care Demo Robot Demon System for Omron Asia Pacific Pte Ltd
26. Plug-in Application for Mobile Communication for Citrine Solution Pte Ltd
27. Polymeric Material Characterisation Using UV-Vis-NIR, DSC and DMA for Esilor AMERA Pte Ltd
29. Responsive Interfaces & Charting Modules for IMSI for Kurata Technologies Pte Ltd
30. Semiconductor Failure Analysis Using AFM for SSMC
31. Serial I/O Data Concentrator for Ascenz Solutions Pte Ltd
32. Smart Vending Machine Supporting Mobile Payment and Remote Inventory Control for STL, Solutions Pte Ltd
33. X-Wing Proof of Concept Wearable Electronics Prototype for AeroSpace Pte Ltd
FOCUS ON INDUSTRY

SCHOOL OF HEALTH SCIENCES (SHS)

NYP was one of six parties that signed an MOU on 16 October 2015 to collaborate on the upskilling of paramedics in Singapore. The other institutions are Singapore Armed Forces (SAF), Singapore Civil Defence Force (SCDF), Institute of Technical Education (ITE), SIM University (UniSIM) and Justice Institute of British Columbia (JIBC). As part of the collaboration, NYP launched the Diploma (Conversion) in Paramedicine in May 2016 taught by experienced trainers from SHS and the School of Business Management.

ENHANCING PARAMEDIC TRAINING & EDUCATION IN SINGAPORE

ALZ ENGAGE-ME-CART

The School of Health Sciences (Nursing) successfully collaborated with KYDZ International in March 2015 to develop the ALZ Engage-Me-Cart, comprising 18 play items, to engage and stimulate cognitive function of individuals with dementia. The cart retails for $950 with NYP receiving 30% of profits generated. The cart received much interest at its designated booth at iCreate in August 2015.

CENTRE FOR ORAL HEALTH ANNOUNCED

Slated for completion in 2019, the Centre for Oral Health (COH) will be the main centre in Singapore to offer subsidised dental care for Singaporeans. Developed by National University Health System, COH will consolidate clinical training for oral health therapy trainees, dentistry undergraduates and postgraduates, and dental assistants. In addition, a designated area – comprising 26 operatories, a waiting area, a tutorial room, a meeting room and X-ray facilities – will be set aside for students undertaking NYP’s Diploma in Dental Hygiene & Therapy course.

OTHER COLLABORATIONS

Key Initiatives & New Developments
1. Appointment of NYP as Sector Coordinator for Healthcare in SkillsFuture Movement
2. Collaboration with Secondary Schools to Develop Education and Career Guidance Package
3. Creation of Site to Showcase SHS Innovation and Projects
4. Four New Teaching Clinic Sites for Occupational Therapy Students – Oasis Day Centre, Bukit Batok Day Centre, Hougang Care Centre, and Community Rehabilitation and Support Service (Pasir Ris)

MOUs (Universities & Educational Institutions)
1. Fooyin University, Taiwan
2. Shanghai Trade Union Polytechnic, China
3. Tzu Chi University, Taiwan

MOUs (Industry)
1. Orange Valley Healthcare Pte Ltd
2. SAF, SCDF, ITE, UniSIM and JIBC

Industry Projects
1. Development of Basic Cardiac Life Support Mobile App for Amdon Consulting Pte Ltd
2. Reminiscence Therapy, Pet Therapy and Garden Therapy Services for Orange Valley Nursing Home
3. Super Milk Can Holder for Tan Kah Kee Young Inventors’ Award 2015
SCHOOL OF INFORMATION TECHNOLOGY (SIT)

FOCUS ON INDUSTRY

The National Healthcare Group Polyclinics worked with SIT students to give them exposure to healthcare analytics such as data visualisation, graphs and reports, while a project with StarHub focused on real-time, location-based, geospatial big data analytics. To enhance human resource management processes for an SME, an SIT team also used text analytics to improve the recruitment process.

WORKING WITH INDUSTRY

ON BIG DATA ANALYTICS

The National Healthcare Group Polyclinics worked with SIT students to give them exposure to healthcare analytics such as data visualisation, graphs and reports, while a project with StarHub focused on real-time, location-based, geospatial big data analytics. To enhance human resource management processes for an SME, an SIT team also used text analytics to improve the recruitment process.

DEVELOPING MOBILE APPS FOR INDUSTRY

In FY2015, SIT worked with several industry partners such as Singapore Land Authority (SLA), Asian Culinary Institute (ACI) and Home-Fix, to create useful mobile applications. Examples include Pocket OneMap for SLA, which won Most Innovative Project (Gold) at the MOE Innergy Awards 2015, and the NYP Alumni e-Card app developed as part of NYP’s Smart Campus initiative.

MOUs (Industry)
1. Cloud Security Alliance Asia Pacific Ltd
2. Tridorant Pte Ltd

Industry Projects
1. Action Community for Entrepreneurship (ACE) Portal for ACE
2. Analytics Tool for Behaviour Monitoring of Children with Autism for National Institute of Education
3. Android-based App for Ninja Track for Keio-NUS CUTE Center
4. Asian Culinary Institute (ACI) Web & Mobile Portal for ACI
5. Digital Patient Feedback for Khoo Teck Puat Hospital
6. Pocket OneMap for SLA
7. Healthcare Analytics for NHG
8. HR Analytics for Organizational Analytics Pte Ltd
9. Knowledge Management and Sharing of Open Source Cyber Intelligence for MINDEF
10. Knowledge Management System for Profiling Malicious Ware for MINDEF
11. Patient Eczema Severity Time Mobile App for Hyphens Pharma Pte Ltd
12. Portfolio Performance Measurement Phase 2 for ST Asset Management Ltd
13. Smart Office Analytics System for S3 Innovate Pte Ltd
14. Statistical Arbitrage System for Wealth Science Ltd
FOCUS ON INDUSTRY

SCHOOL OF INTERACTIVE & DIGITAL MEDIA (SIDM)

STUDENT-CREATED CONTENT TO FEATURE IN NEW INTERNATIONAL PRODUCTION

A group of 20 SIDM students will produce digital content for 52 episodes of Jungle Beat, an animated series by Infinite Studios that will be broadcast in 180 territories around the world. NYP and Infinite Studios will work closely to develop enhanced contextual learning environments for the students to apply the skills they have learnt on an actual animation production.

NYP and Infinite Studios signed a new MOU on 6 January 2016 to collaborate on Jungle Beat.

SIDM STUDENTS FIRST IN SOUTHEAST ASIA TO WORK ON IDEAS FOR CONTINENTAL

NYP and Infinite Studios signed a new MOU on 6 January 2016 to collaborate on Jungle Beat.

NYP AND UBISOFT LAUNCH GAME DEVELOPMENT INTERNSHIP PROGRAMME

NYP signed an MOU with Ubisoft Singapore Pte Ltd on 23 October 2015 to provide highly relevant game development training and collaborative mentorships to SIDM students. Under NYP’s Structured Internship Programme (SIP), final year students will be placed in a real-life production environment at Ubisoft. Selected students may also be hired under the SkillsFuture Earn and Learn Programme and be able to embark on a Specialist Diploma course.

Mr Ralf Lemminger, SVP, Interior Electronics Solutions, Continental Automotive GmbH, and Mr Edward Ho, NYP’s Deputy Principal (Development), inked the MOU on 29 February 2016.

MOUs (Universities & Educational Institutions)

1. Hoseo University, South Korea
2. Kajinni University of Applied Sciences, Finland

MOUs (Industry)

1. Ayer Rajah Constituency Office
2. Gumi Asia Pte Ltd
3. Infocomm Development Authority of Singapore
4. KIND ASIA Ogilvy & Mather (S) Pte Ltd
5. Mediacorp Pte Ltd
6. Robot Playground Media Pte Ltd
7. Scrawl Studios Pte Ltd
8. Wacom Singapore Pte Ltd

Key Initiatives & New Developments

1. NYP-WACOM Digital Art Experience Lab
2. Singapore Games Creation Competition as Part of The National Infocomm Competition for Infocomm Development Authority of Singapore
3. Structured Internship Programme (SIP) at Kajinni University of Applied Sciences, Finland
4. SIP at Gumi Asia Pte Ltd
5. SIP at KIND ASIA Ogilvy & Mather (S) Pte Ltd
6. SIP at Mediacorp Pte Ltd
7. SIP at Robot Playground Media Pte Ltd
8. SIP at Scrawl Studios Pte Ltd
9. Student Exchange at Hoseo University, South Korea

OTHER COLLABORATIONS

Industry Projects

1. Anti-Drug Mobile Game “Aversion” for Central Narcotics Bureau
2. Branding and Awareness Campaign for Kranji Countryside Association
3. Chapter 6 “ONWARDS” Motion Graphic Production for National Day Parade 2015
4. “Got to Move” Interactive Dance Booth Interaction and Gamification Design for National Arts Council
5. House of Fortune Drama Series for Mediacorp Pte Ltd
6. Interactive and Digital Media Exhibitions at the National Library Board
7. Little Wayang Boy Animation for Brainchild Pictures Pte Ltd
8. Philatelic History Exhibition Interaction Design for Singapore Philatelic Museum
9. Preventing Major Amputations in Diabetic Patients Animation for The Good Life
10. Sealed With A Kiss Drama Series for Mediacorp Pte Ltd
11. The Journey 3: Our Homeland Drama Series for Mediacorp Pte Ltd
12. Trailer for the Book Speaking of Children for Singapore Children’s Society

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Ubisoft Singapore Managing Director Mr Olivier de Rotalier and Ms Jeanne Liew, NYP Principal & CEO, formalised the partnership for the SIP.

A new partnership established in February 2016 between NYP and international automotive supplier and technology company Continental Automotive has opened new doors for students from SIDM. They will be able to embark on Continental’s global innovation programme, “Trend Antenna”, to explore ideas for the future of mobility. The programme encourages students to conceptualise and develop ideas to enhance user experience for future vehicles.

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