

Connect

@ School of Applied Science

DIPLOMA IN APPLIED FOOD SCIENCE & NUTRITION

Students' Project Brings Hope to Cambodian Kids



●● *The wealth of information and experience we derived from this project is phenomenal. We are grateful to Temasek Polytechnic (TP) for providing this opportunity which has not only deepened our knowledge in the area of nutrition but has also provided an insight into the lives of people in the developing countries.* ●●

– June Toh

Four students (Alicia She Centing, Alisah Bte Mohammad Din, June Toh Hui Yuan and R. Geetha) leapt at the opportunity to embark on a challenging Major Project when they decided to conduct nutrition assessment of the children in Lakeside T House Slum Area in Phnom Penh.

Intense preparation ensued as the students researched on the nutrition assessments that had been carried out in developing countries in South-east Asia, prepared a series of anthropometric and dietary assessment forms, as well as age charts and picture cards of food and sanitary facilities to facilitate communication with the Khmers.

Once they arrived in Cambodia, they were busy with carrying out anthropometric measurements and assessments of the Khmers' dietary habits and other contributing factors of malnutrition. The field work was not without challenges but the students took it in their stride and persevered. Geetha shared her experience: "one of the main concerns the group faced was conducting assessments and interviews within the time constraint to meet the sample size of 125 respondents. So we had to change our plans and conducted group interviews instead." The students were unfazed by the numerous obstacles encountered as they were determined to make a difference to the lives of the children.

The survey findings revealed that malnutrition is a serious problem in this area. "We hope that our project will garner sufficient attention to improve the nutritional status of the Cambodian children," said Alisah. The students recently presented their findings to some Cambodian officials in Singapore.



DIPLOMA IN BAKING & CULINARY SCIENCE

Winning International Culinary Competitions

Food & Hotel Asia 2012 Culinary Challenge Winners



●● The preparation was really tough and the training was tiring, but it's worth it if you have the passion and determination. ●●

- Desmond Shen Rong



Silver Award Winner
'Two to Tango' Apprentice Team Challenge



Silver Award Winner
'Plated Desserts' Open Individual Challenge

Congratulations to our 'Top Chefs'!

- **Desmond Shen Rong & Chong Kian Bin** – Silver in Two to Tango Apprentice Team Challenge
- **Wong Ju Lih & Quek Yong Chieh** – Bronze in Two to Tango Apprentice Team Challenge
- **Candy Tay** – Silver in Desserts Cold Display Individual Challenge
- **Pow Jia Min** – Bronze in Asian Meal Cold Display Individual Challenge
- **Natalie Oh Hui Ru** – Bronze in Desserts Cold Display Individual Challenge
- **Pamela Puteri** – Bronze in Desserts Cold Display Individual Challenge

Whipping Up French Cuisine

Tan Shi Min continued working at Absinthe Restaurant Français, where she had interned as a student, after graduating from TP. She has since successfully risen to her current position as Chef de Partie. As a student, Shi Min had participated actively in various culinary and pastry competitions, and her latest win was representing Singapore at the 5th Penang Chefs Challenge 2012, where she clinched the 3rd place, as part of the Apprentice team.



●● Allons-y! Allons-y! I'm all geared up to work in a fast-paced environment and I absolutely love the rush. In Absinthe, I work with exotic game meat like venison, rabbit and various types of fish like Turbot and John Dory. Exactly one year back, I had mistaken John Dory for a person's name when it appeared on the ordering ticket! ●●

- Tan Shi Min
Chef de Partie
Absinthe Restaurant Français

Helping Communities in Cambodia

Students learn the importance of being socially responsible through the Community Involvement Programme and Service Learning.



Teaching Cambodian trainees basic culinary and foodservice management skills to operate a café in Phnom Penh.

DIPLOMA IN BIOMEDICAL SCIENCE

Our Pioneer Batch of Phlebotomy Graduates

Students at TP have an enriching learning experience which often takes them beyond the traditional lectures and tutorials. Educational enrichment programmes are very much part of our curriculum; one such programme is the Phlebotomy Course which is organised in collaboration with the Department of Laboratory Medicine, Jurong Health. During the five-week-long course, biomedical science students are taught, through a series of lectures, demonstrations and hands-on practice, the techniques of drawing blood from the vein safely as well as performing ECG (Electrocardiogram) effectively and efficiently. Students are awarded a Certificate of Attendance in Phlebotomy upon completion of the course and they are also eligible for certification as an International Phlebotomy Technician by the American Society for Clinical Pathology.



“I am excited that this new skill would enhance my employability and open up new job opportunities for me. I would now be able to secure a job that requires quality phlebotomy skills.”

- Lim Jia Qi



“This course has boosted my confidence in handling patients. I did not expect that as a future Medical Technologist, I would be able to, in such a short time, acquire a skill that is usually associated with doctors and nurses.”

- Ameer A. Ali



TP's Diploma in Biomedical Science course has immersed me into the world of human health and diseases which has deepened my interest and passion in Science.

- Siti Farah

A Scientist in the Making

With excellent GCE 'O' level results, Siti Farah Binte Fadhlullah could have easily breezed into any junior college of her choice. However, this young lady at the tender age of 16 had already set her mind on pursuing a diploma in Biomedical Science, and knew that TP would be a good training ground for her to achieve her ambition of contributing towards the research and development of cancer diagnostics.

In pursuit of her dream, Siti Farah spent her semester breaks working on various research projects under the poly's Differential Research Programme. It was her single-minded determination that led her to work on a research project on "Isolation of Circulating Tumour Cells (CTCs) Using a Novel Microsieve Cartridge" during her six-month internship at the Institute of Bioengineering & Nanotechnology (IBN), where she assisted in improving this device which is able to detect cancer faster and less invasively compared with existing biopsy techniques.

An aspiring researcher, Siti Farah received the IBN Promising Young Researcher Award 2011 as well as the Merit Award at the Polytechnic Student Research Programme 2012 in recognition of her excellent research efforts. She also clinched the Merit Award when she presented this research project at the Young Scientists' Symposium 2012.

Siti Farah is currently pursuing a Life Sciences degree programme at NUS.

DIPLOMA IN BIOTECHNOLOGY

From Diploma to PhD



**Lim Tingsen
Benson**

Research Fellow at the
Department of Genetics,
University of Melbourne

●● The quality of teaching at TP is good. In my opinion, the standard at which TP educates students is comparable to university level. A diploma not only equips you with the essential set of skills to enter the workforce but is also a good stepping stone to enter university. Credit exemption and advanced standing for a university degree is highly motivating! ●●



Lim Ai Khim

Research Fellow at
the Institute of Medical
Biology, A*STAR

PhD in Biological
Sciences, Temasek
Life Sciences Laboratory

National University of
Singapore (2006-2010)

●● The diploma course provided the foundation, with respect to theory and lab skills, for my university studies. ●●



Bioconservation and Biodiversity Projects with National Parks Board (NPARKS)

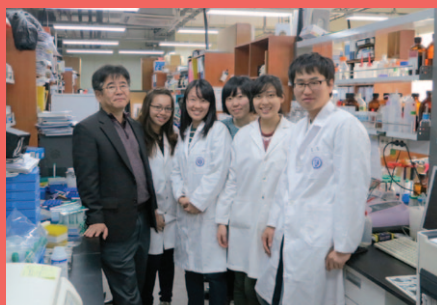
Learning has taken on a new dimension for students with our collaborative projects with NPARKS on bioconservation and biodiversity. The first project involves the survey of freshwater streams for their baseline fauna biodiversity and water quality (eg. oxygen content, turbidity, pH etc). The second project is bioconservation-oriented and involves the reintroduction (replanting) of endangered plant species back to the nature reserves or nature parks. These endangered plants had previously been collected and re-propagated at NPARKS by their staff.

Students who have been involved in these projects have not only found them educationally enriching but have also seen this as an opportunity to contribute to our community.

Overseas Internship Programme

International
Research Experience

**Translational Research Centre
for Protein Function Control
Yonsei University, Korea**



Evangeline Tan (2nd from left) and Hsu Shih Han (5th from left) posing with Centre Director, Professor Kang-Yeil Cho (far left)

**National Centre for Genetic
Engineering & Biotechnology (BIOTEC)
Thailand Science Park, Thailand**



See Xin Er performing research
in the Life Sciences

DIPLOMA IN CHEMICAL ENGINEERING

Twin Feats: First Class Honours in Chemistry



I knew that the Diploma in Chemical Engineering was the course for me after attending the Open House. This is the best decision I have made as TP provides a good foundation for graduate studies.

- Lau Jia Yi



My internship at the Institute of Bioengineering & Nanotechnology exposed me to cutting-edge research in new technologies and I was inspired to pursue my interest in research.

- Ang Chung Yen

Good things come in pairs. Two students from the same cohort have recently graduated with top honours. Lau Jia Yi and Ang Chung Yen, both classmates in the Diploma in Chemical Engineering, read Chemistry at NUS and NTU respectively and have graduated with First Class Honours.

They attribute their success to TP's all-embracing education system that had a positive impact on them. Jia Yi, an express stream student, and Chung Yen who was from the normal academic stream, had decided on pursuing TP's Diploma in Chemical Engineering because of its strong emphasis on Chemistry. In fact, both shared that "TP's extensive coverage of content, focus on laboratory skills and exposure to state-of-the-art equipment such as the High Performance Liquid Chromatography and Atomic Absorption Spectroscopy provided us with an edge over our JC counterparts at the university". Additionally, our

varied teaching strategies which include problem-based learning encourage independent learning and prepared them for the rigours of university education.

There were also plenty of opportunities for them to hone their presentation skills and the hectic schedule in TP taught them the importance of time-management and prioritising their tasks. But what really made the difference was the approachable and caring attitude of the lecturers. "The lecturers were always at hand whenever I encountered difficulties with the modules I took," added Jia Yi.

As the versatility of a Chemical Engineering diploma allows you to branch into various fields, Jia Yi is currently an Assistant Superintendent at Immigration & Checkpoints Authority while Chung Yen has decided to continue with research work and is pursuing a PhD in Chemistry at NTU.

DIPLOMA IN PHARMACEUTICAL SCIENCE

Pharmaceutical Industry



Rennie Neo

Senior Manufacturing Associate
Baxter Bioscience Singapore

●● My student internship at Ranbaxy's pharmaceutical manufacturing facility in Kedah, Malaysia, stimulated my interest in overseas training. I subsequently took on a trainee position under the Economic Development Board's Overseas Strategic Attachment and Training Programme in California, USA. Upon completion of the training, I continue to grow in my career as a Senior Manufacturing Associate. ●●

Chemistry



Khairunnisa Bte Abdul Ghaffar

Pursuing PhD in Medicinal Chemistry
Graduated with BSc (Biomedical Science)
1st Class Honours in Biochemistry
University of Queensland
Advanced placement: 2 years

●● I was especially intrigued by the synthesis pathways introduced in Organic Chemistry when I was studying in TP. As I was interested in pursuing this, in the area of drug discovery, I decided to further my research in Medicinal Chemistry for my postgraduate studies. ●●

Pharmacy Practice



Natalia Veronica

Pursuing BSc. (Pharmacy) – 1st Year
National University of Singapore

●● My learning journey at TP was very exciting. The laboratory sessions were enjoyable as I had the chance to use different kinds of analytical instruments like UV-Vis Spectrometry. I thoroughly enjoyed modules such as Good Dispensing Practice and Pharmacotherapy which have provided a solid foundation for my university studies. ●●



Joyce Chong

Pursuing Masters in Pharmacy (Hons)
University of Manchester

Forensics



Superintendent Jason Loke

Assistant Director,
Forensics Division
Criminal Investigation
Department,
Singapore Police Force

●● Forensics is the application of science to solve crimes and is used to provide answers within the legal system. This course will provide participants with skill sets relevant to the complex world of forensics and give them a glimpse of the use of forensics in criminal investigation. ●●

**A Solid Foundation
to a Multitude
of Career Paths
and Educational
Opportunities**

Biomedical Science & Pharmacology

Maryam Bte Yasin

Pursuing BSc.
Pharmacology &
Physiology (Hons)
University of Manchester



Medical



Deborah Khoo

Pursuing MBBS –
2nd Year
School of Medicine
University of Queensland

●● Working on drug discovery for Parkinson's disease during my industrial attachment at the University of Western Australia affirmed my passion for medicine! I am grateful to TP for providing this eye-opening experience. ●●

Academia



Eugene Lee

Pursuing BSc.(Ed) – 1st Year
National Institute of Education
Nanyang Technological University

DIPLOMA IN VETERINARY TECHNOLOGY

RWS Scholarship Winner

The best part of Lee Jia Rong Bernadette's educational experience in TP was her 5-month internship at Marine Life Park (MLP). As our first recipient of the Resorts World Sentosa (RWS) Scholarship, she had the opportunity to get up close and personal with marine life.

As an intern at the largest oceanarium in the world, Bernadette's work covered a myriad of tasks, from marine conservation and education to ecological research of sea urchins, as well as assisting the aquarist and water quality lab teams. Thrilled about her experience at MLP, Bernadette shared how she had assisted the team involved in preparing for the opening of the SEA Aquarium, one of the main tourist attractions, with the food preparation, feeding the fish and the acclimatisation process of new fish shipments. "RWS provides an excellent learning environment. It is a fun and exciting place to work with encouraging mentors and wonderful colleagues," she added.

For Bernadette, her experience with marine life will not end with her internship as she plans to further her studies in the Life Sciences specialising in Marine Biology at NUS.



I was very fortunate to benefit from the real-life training that the TP Animal Clinic provides for students as well as the numerous programmes such as the Overseas Community Project where as a volunteer at the elephant sanctuary, I had the opportunity to work with wildlife.

- Lee Jia Rong Bernadette



Venturing Beyond National Territories

Students' learning experience was deeply enriched when they ventured into the Philippines and visited institutions and organisations to learn more about pig husbandry, artificial insemination, rabies vaccination, sterilisation of stray dogs and processing of dairy milk.



●● We had heard of artificial insemination but how many actually get the opportunity to witness this procedure. It was a rare opportunity! We also learnt more about sperm collection and preservation. ●●

- Valerie Yeo



●● It was an insightful experience on using a portable milking machine, learning about the activities on the dairy farm, as well as testing and processing of dairy milk. ●●

- Eileen Goh

●● We lent a helping hand by restraining the dogs and monitoring both the heart and respiratory rates. ●●

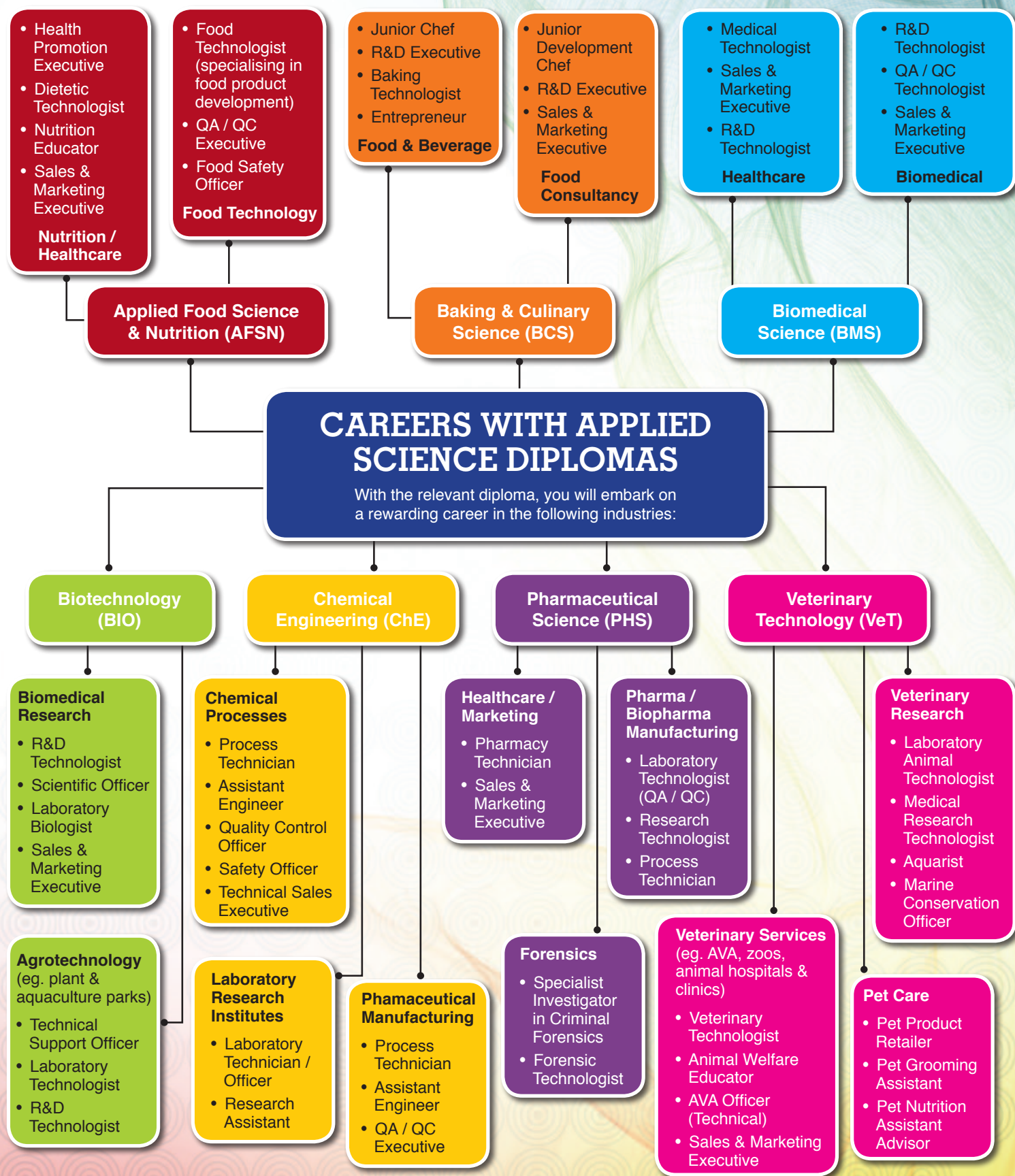
- Hannah Lum



●● The study trip provided an international dimension to our education. We had the opportunity to practise our skills as veterinarian technician students by vaccinating dogs against rabies. ●●

- Jasmine Tan





Universities with Advanced Standing

AFSN Graduates	BCS Graduates	BMS Graduates	BIO Graduates	ChE Graduates	PHS Graduates	VeT Graduates
<ul style="list-style-type: none"> Singapore NTU, NUS, SMU, SIT-Newcastle Australia Curtin, Deakin Flinders, Newcastle, New South Wales, RMIT, Sydney, Queensland New Zealand Otago United Kingdom King's College, Leeds Reading, Surrey 	<ul style="list-style-type: none"> Singapore SIT-CIA 	<ul style="list-style-type: none"> Singapore NTU, NUS Australia UNSW, UTS, ANU, Queensland, Melbourne, RMIT, Murdoch, UWA United Kingdom Manchester, Newcastle, Loughborough 	<ul style="list-style-type: none"> Singapore NTU, NUS Australia Australian National, La Trobe, Monash, Melbourne, Murdoch, New South Wales, Sydney United Kingdom Birmingham, Griffith, Strathclyde, University College London 	<ul style="list-style-type: none"> Singapore NTU, NUS, SMU, SIT Australia Adelaide, Curtin, New South Wales, Queensland, Melbourne, Western Australia United Kingdom Birmingham, Newcastle, University College, London 	<ul style="list-style-type: none"> Singapore NTU, NUS Australia Queensland, Monash, Western Australia United Kingdom Birmingham, Manchester, Glasgow, Southampton 	<ul style="list-style-type: none"> Singapore NTU, NUS Australia Melbourne, Murdoch, Queensland, Sydney New Zealand Massey United Kingdom Glasgow, Strathclyde USA Iowa