New HOD’s message

Professor Jean Paul THEIRY

I am extremely pleased to preface this quarterly edition of Biochem Buzz. As the new HOD, I would like to thank everyone for their very warm welcome; my task will be much easier in a friendly and collegial atmosphere.

This internal newsletter is one of the ways in which we can disseminate information on the life of the Department. Clearly, once again, the Department shows its strength within the YLL SOM and beyond.

I mentioned during my recruitment presentation that I will discuss in depth, the research and teaching with all faculty members. I will soon start this process, together with A/P Marie Veronique Clement, our new Deputy Head.

I have also suggested that the Department may benefit from the support of a scientific editor; I hope this will soon become a reality.

My main mission will be to provide impetus leveraging on existing programs that will create exciting new research with the potential to be published in high-impact factor journals and to attain grant support. I am open to suggestions from everyone.

I would also like to state on record my appreciation and thanks to A/P Tan Tin Wee and A/P Maxey Chung for their leadership in the past year. They are certainly valued members of the Department.
A/P Tan Tin Wee

♦ He won the Global Connectors Award (Recognizing individuals from around the world who have made significant contributions to the global growth and use of the internet) and inducted into the Hall of Fame 2012 Inductees. The ceremony was held on 23 April 2012 at the Internet Society’s Global INET 2012 conference in Geneva, Switzerland.

♦ He was featured in the Straits Times, Sunday 29 April 2012 for his recognition and contribution in the internet field.

♦ A/P Tan is Program Committee Member of the International Symposium on Network Enabled Health Informatics, Bio-Medicine and Bioinformatics (HI-BI-BI 2012) to be held on 27-28 August 2012 in Istanbul.

♦ He is also member of jJAM Expert Panel (Media Development Authority, the Interactive Digital Media Programme Office – IDMPO) to provide guidance and reviews for projects.

♦ A/P Tan is appointed as member of Scientific Advisory Committee of the Program on Bioinformatics – the Philippine Genome Center.

♦ He is also a member of the 2012 InCoB International Advisory Committee for the official conference of Asia-Pacific Bioinformatics Network to be held 3-5 October 2012, Bangkok, Thailand.

♦ A/P Tan was involved in the Singapore-Japan High Performance Computing Workshop which was held on 27-28 February 2012 at Grand Copthorne Waterfront.

A/P Chung Ching Ming, Maxey

♦ A/P has been re-appointed as Country/Region Advisor for Australia/New Zealand at the International Relations Office from 1 April 2012 to 31 March 2013.

♦ He has been elected to the membership of the NUS Senate Delegacy from 1 July 2012 to 30 June 2014.

A/P Markus Wenk

♦ A/P Wenk and his team’s development of new methodology for detecting TB using novel TB biomarkers and their collaboration with the Foundation for Innovative New Diagnostics (FIND) aiming to translate these targets into a diagnostic test that is affordable, easy to use and produces rapid results and can be used by community health workers in poor countries was reported in The Straits Times 15 December 2011 issue.

♦ A/P Wenk is the organizer of the 4th International Singapore Lipid Symposium which was held on March 13–16 2012.

A/P Chang Chan Fong

♦ A/P Chang will be coordinating a new Life Sciences Module LSM3264 “Environmental Biochemistry” which will start in Semester 2 AY2012/2013.
A/P Too Heng-Phon

♦ A/P Too's patents on “An Integrated Solid Phase Extraction Coupled Ultra-Performance Liquid Chromatography-Mass Spectrometry (SPE-UPLC-MS) Method for the Profiling of DXP Metabolites and System Diagnostics of DXP Pathway” and “Analyte-specific spatially addressable nanostructure array (ASANA) – integrated Si nanowires with microfluidics for enhancement of analytes capture” were filed as the US provisional application on 12 March 2012.

A/P Lee Guat Lay, Caroline

♦ A/P Lee’s recent outstanding publication titled “An update on ABCB1 pharmacogenetics: insights from a 3D model into the location and evolutionary conservation of residues corresponding to SNPs associated with drug pharmacokinetics” in The Pharmacogenomics Journal was well accessed with over 1000 hits within first month of release.

A/P Gan Yunn Hwen

♦ A/P Gan was featured in the Straits Times and LianHe Zaobao on Thursday 3 May 2012, for her team’s research findings on patients with Type 2 diabetes lacking a molecule impairing efforts to kill unwanted bacteria. Her research paper was published in The Journal of Clinical Investigation.

A/P Caroline Lee and Dr Kenneth Ban

♦ A/P Caroline Lee and Dr Kenneth Ban served as judges during the Singapore Science & Engineering Fair held from 7 to 8 March 2012. Their commitment and expertise were deeply appreciated by the Ministry of Education.

Dr Wu Qiang

♦ Dr Wu will be coordinating a new Life Sciences Module LSM4245 “Epigenetics and Chromatin Biology” which will start in Semester 1 AY2012/2013.

Dr Lim Yoon Pin

♦ PCT (Patent Cooperation Treaty) filed for his invention on “novel cancer target and biomarker.”
♦ Dr Lim’s provisional patent filed for “discovery of novel breast cancer metastasis effectors using phosphoproteomics” is in progress.
♦ He is appointed as SERI Adjunct Senior Research Scientist from 1 February 2012 for a period of 3-years.
♦ Dr Lim’s proposal for a symposium on Translational and Clinical Research in the Industry has been approved by YLL SOM Dean’s office and will be rolled out in Semester 1 AY2012/2013.
♦ He was an invited speaker for the A*STAR – China Ministry of Science & Technology (MOST) Joint Symposium on Biological Sciences, 13-14th March 2012.

Adjunct Assistant Professor Dr Tong Joo Chuan, Victor

♦ Dr Tong is honoured as one of the World Economic Forum (WEF) Young Leaders amongst four young professionals from Singapore. The news was released in the Straits Times on 7 March 2012.

Ms Sha Lanjie and Ms Qian Feng

♦ Congratulations to Ms Sha Lanjie and Ms Qian Feng for winning the NUHS Values-In-Action (VIA) 2012 individual award.
CONGRATULATIONS! – STUDENTS

Mr Lum Fok-Moon (Supervisor: A/P Tan Tin Wee and AP Ng Fong Poh Lisa)

- Awarded the NUS Merlion Fellowship 2011 which is a France-Singapore research project and funded for 3 years.

Ms Hou Qian (Supervisor: A/P Chung Ching Ming, Maxey)

- She is one of the recipients of the Best 10 Poster Presentation Award ($100 Cash + Certificate of Award) at YLLSOM 2nd Annual Graduate Scientific Congress 2012 held on 15 February 2012 at NUHS Tower Block.

Ms Wu Wei (Supervisor: A/P Chung Ching Ming, Maxey)

- Wu Wei is one of the recipients of the Best 10 Poster Presentation Award ($100 Cash + Certificate of Award) at YLLSOM 2nd Annual Graduate Scientific Congress 2012 held on 15 February 2012 at NUHS Tower Block.
- She is also one of the recipients for the Young Travel Scientist Award in the 6th AOHUPO Congress in Beijing.

Mr Lin Qifeng (Supervisor: A/P Chung Ching Ming, Maxey)

- Lin Qifeng is one of the recipients for the Young Travel Scientist Award in the 6th AOHUPO Congress in Beijing.

Mr Lee Seow Chong (Supervisor: A/P Chung Ching Ming, Maxey)

- Lee Seow Chong is one of the recipients for the Young Travel Scientist Award in the 6th AOHUPO Congress in Beijing.

Ms Valentina Migliori (Supervisor: Adjunct Assistant Professor Dr Ernesto Guccione)

- She is one of the recipients of the Top 3 Best Research Publication Award ($200 Cash Prize each) at YLLSOM 2nd Annual Graduate Scientific Congress 2012 held on 15 February 2012 at NUHS Tower Block.
Ms Sugunavathi Sepramaniam (Supervisor: Professor Jeyaseelan, Kandiah)

- Presented her research findings at the 1st NKF Scientific meeting held on Saturday, 4 February 2012 and received the 1st prize for her oral presentation from a panel of judges including our NUS President as the Chairman.
- She is the recipient of the Chua Toh Hua Memorial Gold Medal for AY2011/2012 for being the Best Doctor of Doctor of Philosophy graduate with the most outstanding research work done in Life Sciences.

**STUDENT’S CONFERRMENT**

Congratulations to the following students on the conferment of their postgraduate degrees. Well done!

<table>
<thead>
<tr>
<th>Name</th>
<th>Supervisor</th>
<th>Prog</th>
<th>Month of Conferment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Lau Siang Lin</td>
<td>A/P Chung Ching Ming, Maxey</td>
<td>MSc</td>
<td>December 2011</td>
</tr>
<tr>
<td>Ms Sugunavathi D/O Sepramaniam</td>
<td>Prof Jeyaseelan, Kandiah</td>
<td>PhD</td>
<td>January 2012</td>
</tr>
<tr>
<td>Ms Benny Paula-Beth Angelica</td>
<td>A/P Michael Raghunath</td>
<td>MSc</td>
<td>January 2012</td>
</tr>
<tr>
<td>Tiqui</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms Lim Shen Jean</td>
<td>A/P Tan Tin Wee</td>
<td>MSc</td>
<td>January 2012</td>
</tr>
<tr>
<td>Mr Cheng Fei</td>
<td>Dr Deng Lih Wen</td>
<td>PhD</td>
<td>February 2012</td>
</tr>
<tr>
<td>Mr Loei Hendrick</td>
<td>A/P Chung Ching Ming, Maxey</td>
<td>MSc</td>
<td>February 2012</td>
</tr>
<tr>
<td>Mr Goh Teck Wah William</td>
<td>Prof Hong Wanjin</td>
<td>PhD</td>
<td>March 2012</td>
</tr>
</tbody>
</table>
# Adjunct Faculty

**A/P Robinson Robert Charles**
- Appointment: Adjunct Associate Professor
- Associate Professor and Principal Investigator, Institute of Molecular and Cell Biology
- Assumed Duty: 1 January 2012

**Professor Hui Kam Man**
- Appointment: Adjunct Professor
- Principal Investigator & Head, Division of Cellular & Molecular Research, NCC
- Assumed Duty: 5 March 2012

## Lab Executives

**Mr Chow Kean Pang**
- Supervisor: Prof Fu Xin-Yuan
- Assumed Duty: 5 December 2011

**Ms Soh Yan Ling Melissa**
- Supervisor: A/P Chua Kim Lee
- Assumed Duty: 26 January 2012

**Ms Ooi Pei Kun**
- Supervisor: Dr Kenneth Ban
- Assumed Duty: 3 February 2012

## Research Fellow

**Ms Hou Peiling**
- Supervisor: Dr Lim Yoon Pin
- Assumed Duty: 22 December 2011
Research Assistants

Ms Fanny Ng
- Supervisor: A/P Tang Bor Luen
- Assumed Duty: 31 October 2011

Ms Khing Suu Suu Aung
- Supervisor: Dr Deng Lih Wen
- Assumed Duty: 24 February 2012

Ms Tay Zoey
- Supervisor: Dr Chen Ee Sin
- Assumed Duty: 1 March 2012

Mr Lee Wei Ren
- Supervisor: Dr Yeong Foong May
- Assumed Duty: 21 February 2012

Ms Khim Ji Hyun
- Supervisor: Prof Fu Xin-Yuan
- Assumed Duty: 6 April 2012

Mr Khanh Phuong Dang
- Supervisor: A/P Markus R Wenk
- Assumed Duty: 5 January 2012

Mr Koh Yong Qin
- Supervisor: Dr Yeong Foong May
- Assumed Duty: 15 February 2012

Ms Liu Jie
- Supervisor: Dr Deng Lih Wen
- Assumed Duty: 13 January 2012

Ms Geng Wei
- Supervisor: A/P Tan May Chin, Theresa
- Assumed Duty: 6 March 2012

Non-Academic

Ms Nurfadillah Bte Mahmood
- Management Assistant Officer – Education
- Supervisor: Ms Aniza A. Wahid
- Assumed Duty: 26 March 2012

Mr Muhammad Irwan Bin Karno
- Management Assistant Officer – Human Resource
- Supervisor: Ms Aniza A. Wahid
- Assumed Duty: 26 March 2012
## Grants Awarded

<table>
<thead>
<tr>
<th>Month</th>
<th>Principal Investigator</th>
<th>Amount</th>
<th>Project title</th>
<th>Source of Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2012</td>
<td>Dr Yew Wen Shan</td>
<td>$179,500</td>
<td>Biosynthesis of Anti-Ageing Therapeutics via Synthetic Polyketide Enzymology</td>
<td>Tier 1 FRT</td>
</tr>
<tr>
<td></td>
<td>Dr Long Yun Chau</td>
<td>$162,200</td>
<td>Role of insulin-induced glycolysis in the regulation of PGC1α-mediated myotube lipid metabolism</td>
<td>MOE Tier 1</td>
</tr>
<tr>
<td>February 2012</td>
<td>Prof Sit Kim Ping</td>
<td>$180,000</td>
<td>Loss of UCP2 in clear cell Renal Cell carcinoma (ccRCC)</td>
<td>Tier 1 FRT</td>
</tr>
<tr>
<td></td>
<td>A/P Caroline Lee</td>
<td>$440,100</td>
<td>SERC Joint Diagnostic Grant (Collaboration with NCC) Development of a tool to predict response of a patients to Fluorouracil/Platinum drugs</td>
<td>BMRC-SERC Diagnostics Joint Grant</td>
</tr>
<tr>
<td></td>
<td>A/P Too Heng-Phon</td>
<td>$46,000</td>
<td>Development of paclitaxel precursor high project title : producing strains of GRAS Bac-terium Bacillus subtilis</td>
<td>SMART Singapore-MIT Alliance for Research and Technology</td>
</tr>
<tr>
<td></td>
<td>A/P Theresa Tan</td>
<td>$84,300</td>
<td>Role of microRNAs in metastasis of hepatocellular carcinoma</td>
<td>MOE AcRF Tier 1</td>
</tr>
<tr>
<td></td>
<td>A/P Tang Bor Luen</td>
<td>$84,300</td>
<td>Delineating molecular mechanisms underlying the cellular dynamics and neuritogenic role of a neuron-enriched Ig superfamily cell adhesion molecule</td>
<td>MOE AcRF Tier 1</td>
</tr>
<tr>
<td>March 2012</td>
<td>A/P Theresa Tan</td>
<td>$100,000</td>
<td>MicroRNA as biomarkers for bladder cancer</td>
<td>NUHS Bench-to-Bedside</td>
</tr>
<tr>
<td></td>
<td>Dr Deng Lih Wen</td>
<td>$100,000</td>
<td>Development and Application of Epithelial Mesenchymal Transition Component Genes as a Discovery Tool for Novel Therapeutics: A Quest for personalized Medicine in Epithelial Ovarian Cancer</td>
<td>NUHS Bench-to-Bedside</td>
</tr>
<tr>
<td></td>
<td>A/P Tang Bor Luen</td>
<td>$100,000</td>
<td>Levels and activities of sirtuins in peripheral blood cells as biomarkers for healthy ageing and ageing disorders.</td>
<td>NUHS Bench-to-Bedside</td>
</tr>
<tr>
<td></td>
<td>A/P Markus Wenk</td>
<td>$531,588</td>
<td>Biomarkers in Tuberculosis : Lipid-Specific Immune Response</td>
<td>BMRC-SERC Diagnostics Joint Grant</td>
</tr>
</tbody>
</table>


Recent Events

Special Guest Speaker at Research in Progress Seminar on 2 February 2012 at MD7, Seminar Room M9

Upon invitation by Dr Thilo Hagen, CEO of 1st Base Company, Mr Lee Kok Choy (Alumni of Department of Biochemistry) gave an inspirational talk on his path to success as well as his company. Mr Lee’s sharing was very well received by many students and some quotable quotes from his talk are:

1) Never over-promise, always over-deliver
2) Quality, first and foremost
3) Always have fun in what we are doing while continuing to be able to exceed our customers' requirements
4) There will always be problems in life, just work around it/them
Staff Welfare Lunch at Aqua Marine @ Marina Mandarin on 20 February 2012

Once again, Biochemistry staff bonded over good food and company at Aqua Marine @ Marina Mandarin on 20 February 2012. Congratulations to the lucky draw winners!

Biochemistry Staff Welfare Committee invites you to

A LUNCH BUFFET!!

AquaMarine @ Marina Mandarin
Monday, 20 February 2012 @ 12pm - 2.30pm

Report at CRC roundabout at 11.20am
Buses will be chartered two ways

RSVP to Fatin (bchfuma@nus.edu.sg) by Thursday, 9 February 2012

STAND A CHANCE TO WIN ATTRACTIVE PRIZES IN OUR LUCKY DRAW!
Honours Open House on 27 February 2012

The open house was organized by our Honours Coordinator – Dr Deng Lih Wen to publicize the Honours projects available from the Department. This is also our opportunity to introduce students to our research work for future postgraduate education.

Where *SCIENCE* and *Medicine* flux ...
Sports & Fun Day on 11 May 2012

The event was organised by Dr Thilo Hagen. It was a day of fun where various labs compete against each other in various interesting games at NUS stadium.

### Department of Biochemistry

**Sports and Fun Day**

11 May 2012 @ NUS Stadium

[http://medicine.nus.edu.sg/bch/event.html](http://medicine.nus.edu.sg/bch/event.html)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30</td>
<td>Registration (Signing of Indemnity Forms and Collection of Race Bibs) Light Breakfast</td>
</tr>
<tr>
<td>9:00</td>
<td>Opening by Deputy Head A/P Marie Clement</td>
</tr>
<tr>
<td>9:15</td>
<td>Commencement of Games</td>
</tr>
<tr>
<td>12:30</td>
<td>Prize presentation followed by lunch</td>
</tr>
</tbody>
</table>

*In case of wet weather, please assemble outside LT25 for indoor activities.*

**Game 1: Floor Ball Stick Challenge**

(Relay – 4 per team)

- Race 1: Team 1-8
- Race 2: Team 9-16
- Race 3: Team 17-23
- Race 4: Final

**Game 2: Cone balancing challenge**

(Relay – 4 per team)

- Race 1: Team 17-23
- Race 2: Team 9-16
- Race 3: Team 1-8
- Race 4: Final

**Game 3: Ping Pong Ball Challenge**

(Relay – 4 per team)

- Race 1: Team 1-8
- Race 2: Team 9-16
- Race 3: Team 17-23
- Race 4: Final

**Game 4: Giant Slipper Race**

(4 per team)

- Race 1: Team 1-4
- Race 2: Team 5-8
- Race 3: Team 9-12
- Race 4: Team 13-16
- Race 5: Team 17-20
- Race 6: Final

**Game 5: Ultimate Frisbee**

(4 per team)

2 x 5min

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**Referees:**

A/P Too Heng Phon  
Dr Long Yun Chau  
Dr Chen Ee Sin  
Dr Wu Qiang  
Chia Yee Ling  
Zenia Tiang  
Melanie Fan  
Cecilia Neo

**Coordinators:**

Veen Senn and Irwan

**Organizers and Helpers:**

Veen Senn, Aslam, Dee, Irwan, Christine, Yin Yin, Thilo

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Win attractive prizes for the best photo competition. Email your best picture of the sport event to: [bchbox2@nus.edu.sg](mailto:bchbox2@nus.edu.sg)
(by midnight Sunday, 13 May 2012)
Safety & Health Improvement Programme 2011/2012
on 29 February 2012

Department of Biochemistry Safety Committee won the Silver award for their project of The ChemSafe Transporter. The team consisted of A/P Caroline Lee, Dr Takao Inoue, Dr Lim Cheh Peng and Mr Wong.

The ChemSafe Transporter
Biochemistry Safety Committee
NUS Building Fire Safety Compliance Award 2011 on 20 March 2012

We are very proud to announce that our MD7 building has won the prestigious Platinum Award for Fire Safety Excellence for second time running, only few buildings in all of NUS to have done so. This Platinum award is given to buildings that have attained the Gold standard for 3 consecutive years or previous year platinum award winner.

The evaluation criteria include not just fire safety compliance but also participation in the annual fire drill, the updating and deployment of Fire Emergency Plans and training of fire wardens.

Our success was only possible with the concerted effort and cooperation from all of our staff and students. To everyone, our deepest thanks and appreciation. Well done!
Department of Biochemistry is 85 years old this year.

The oldest faculty in NUS is the Yong Loo Lin School of Medicine (107 years old), while the youngest is Saw Swee Hock School of Public Health (SSHSPH) established in October 2011.

Before the modular system was introduced, examinations were not conducted at the end of each semester, but at the end of the academic year for a year’s work!

Examinations were once held in exhibition halls such as those in the former World Trade Centre (now Harbour Front) and IMM located at Jurong.

The minimum distance required between two tables in an examination hall is 0.7m.

On 19 July 1963, a fire broke out in the lecture theatres that were located directly above the Medical Library. Within minutes, staff and students formed a human chain and books were passed from one person to another and rescued to safety outside the building. Their quick response saved countless of library books!

If there is an emergency, you can contact the Campus Security 24/7 Hotline at 68741616 for Kent Ridge Campus.
Congratulations to Dr Wang on her third child, a baby boy, Jonathan Teo.

Congratulations to Yanging for her second child, a baby boy.

Congratulations to Siaw Ching for her second child, a baby girl, Putri Adrianna Chai Abdul Rasied.

We bid adieu and wish them all the best for their future endeavors to:

- Mr Zhang Kai
- Ms Dashayini Mahalingam
- Mr Ye Mon Than
- Ms Kwok Wing Sze Alice
- Mr Loo Eng Kiat Alvin
- Mr Wang Fan
- Ms Lynette Lim
- Ms Lim Cheh Peng
- Ms Lissya Lettisya Santaso
- Ms Ng Ah Sock Angie
- Ms Lo Shu Mei Michelle
- Ms Chong Poh Kuan Shirly
- Ms Goh Kah Yee
- Ms Lam Buu Duyen, Jenny