



APFCB News

The Newsletter of the Asia-Pacific Federation for Clinical Biochemistry
and Laboratory Medicine for circulation among APFCB and IFCC members



2018
Issue 1

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APFCB Membership

Members

Australasian Association of Clinical Biochemists (AACB)
Association of Clinical Biochemists of India (ACBI)
Association for Clinical Biochemistry, Sri Lanka (ACBSL)
Chinese Society of Laboratory Medicine (CSLM)
Chinese Association for Clinical Biochemistry, Taiwan (CACB)
Hong Kong Society of Clinical Chemistry (HKSCC)
Indonesian Association for Clinical Chemistry (IACC)
Iranian Association of Clinical Laboratory Doctors (IACLD)
Japan Society of Clinical Chemistry (JSCC)
Korean Society of Clinical Chemistry (KSCC)
Malaysian Association of Clinical Biochemistry (MACB)
Mongolian Association of Health Laboratories (MAHL)
Nepal Association for Medical Laboratory Sciences (NAMLS)
Pakistan Society of Chemical Pathologists (PSCP)
Philippine Association of Medical Technologists (PAMET)
Singapore Association of Clinical Biochemistry (SACB)
Thailand Association of Clinical Biochemists (TACB)
Vietnamese Association of Clinical Biochemistry (VACB)

Affiliate Members

Association of Medical Biochemists of India (AMBI)
College of Community Physicians of Sri Lanka (CCPSL)
Chinese Association of Clinical Laboratory Management (CACLM)
Macao Laboratory Medicine Association (MLMA)
Nepalese association of Clinical Chemistry (NACC)
Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL)

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Sukraa Software Solution Pvt. Ltd.
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Wondfo Guangzhou
Snibe Diagnostics

APFCB Executive Board and Chairmen Of Committees, Elected November, 2016

Executive Board

President	Sunil K Sethi Department of laboratory medicine National University Hospital, Singapore sunil_sethi@nuhs.edu.sg
Immediate Past President	Leslie C Lai Gleneagles, Kuala Lumpur, Malaysia lesliecharleslai@gmail.com
Vice-President	Dra. Endang W. Hoyaranda Prodia Group, Jakarta, Indonesia patsks@nus.edu.sg
Secretary	Helen Martin Unit Head Toxicology, Chemical Pathology, SA Pathology Helen.Martin2@sa.gov.au
Treasurer	Leila Florento leilaflorento@gmail.com
Corporate Representative	Alexander Wong Siemens Healthcare Diagnostics Holding GmbH, Germany alexander.wong@siemens.healthineers. com

Chairman of Committees

Communications	Praveen Sharma All India institute of Medical Sciences Jodhpur, India praveensharma55@gmail.com
Education & Laboratory Management	Tony Badrick Brisbane, Australia tony.badrick@rcpaqap.com.au
Scientific	Dr. Samuel Vasikaran Samuel.vasikaran@health.wa.gov.au
Congress and Conference	Dr. Elizabeth Frank anet21frank@gmail.com

Submissions

The APFCB News welcomes suitable contributions for publication. These should be sent electronically to the Chief Editor. Statements of opinions are those of the contributors and are not to be construed as official statements, evaluations or endorsements by the APFCB or its official bodies.

**Cover page: "Snow-Covered Bamboos with Sparrows".
Contributed by Tan It Koon
Founding and Past President APFCB**

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From the desk of Chief Editor

Dear Friends,

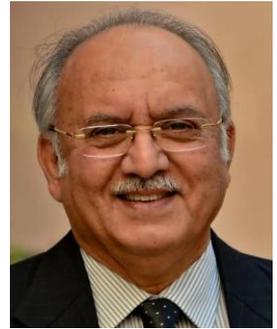
Greetings for the New Year!

It is with a sense of gratification that I present to you the first issue of APFCB News 2018. This issue shall be covering all the major activities of member societies during the latter half of 2017 and the first quarter of 2018. I would like to thank those member societies and national representatives who have contributed by sending their respective societies' timely reports for this issue. However, this year we have not received many member societies' reports and it reflects in this issue. I request all the member societies to send their activity reports for the future APFCB news editions and make it a useful platform for all to share their work and views. I am would also request our corporate partners to extend their support in the form of scientific articles and advertisements' APFCB News. We hope to have their sustained support in future.

The attractive painting on the cover page of the current issue of APFCB News "Snow-Covered Bamboos with Sparrows" has been graciously contributed by Prof. Tan It Koon from his precious art work. Prof. Tan It Koon the founding and the past president of APFCB has been an active contributor to the progress and development of APFCB. Recently Prof Tan It Koon artwork was published in hard cover book "Chinese Contemporary Famous Artistes and their Unique artworks" by Wen Lian publisher of the Central Government Cultural enterprise under the Chinese Ministry of Finance. I'm thankful to him for providing beautiful painting for Cover page from his art treasure. His constant support is extremely inspiring.



Praveen Sharma
Chief Editor



Message from APFCB President...



Dear friends and colleagues,

I am delighted to be able to share this first 2018 APFCB e-Newsletter with all of you. I would like to thank Professor Praveen Sharma and the editorial team for putting together, yet another well-constructed update from the various national societies of the APFCB.

2017 has signaled a change in APFCB administrative management. Following the elections of November 2016 in Taipei, Taiwan, the new Executive Board took office on 1 January 2017. There were immediate housekeeping issues like change in banking signatories and corporate secretariat functions. We also recently managed to activate electronic banking to facilitate efficient banking transactions.

The APFCB EB and available appointed Committee Chairs met in Singapore in February 2017 to map out the strategy and proposed activities for the year. Each committee was tasked with continuing the good work of the past administration as well as to kick off new initiatives.

I am proud to announce the second APFCB-MACB Chemical Pathology course to be held over two days in Kuala Lumpur, Malaysia. The programme is wide ranging and will cover topics on statistics, core clinical biochemistry and laboratory automation, point of care testing and clinical case studies. This is an excellent learning opportunity and refresher course for all of us working in this field of healthcare. I have no doubt that this event will be a resounding success.

Another upcoming scheduled activity is the 2nd APFCB-SACB-Siemens Specialty Meeting on Laboratory Excellence. This half day meeting in Singapore is in late September and will capitalize on the expertise of the College of American Pathologists (CAP) faculty who would be travelling to the region. I would like to thank Siemens Healthiness for their support in the organization and execution of the event.

My heartiest congratulations to Anil Gautam, from the Department of Medical Laboratory Science Faculty of Health Science, Pokhara University, Kaski, Nepal. Anil is the proud recipient of the APFCB-AACB Travel Scholarship. He will be supported to attend the 55THAACB Annual Conference in Melbourne, Australia in September 2017.

The APFCB is also collaborating with other global federations and societies and we have very strong links the IFCC, AACC and WASPaLM.

The APFCB will be supporting a symposium entitled 'Informatics and Laboratory Results' at the 29THWASPALM World Congress in Kyoto, Japan in November 2017. There are a number of ongoing projects under discussion with our global partners and many APFCB member societies will benefit from scientific and technical workshops planned for 2018 and 2019.



The APFCB EB recognizes the value of collaboration and look forward to working with every member society to bring scientific and academic events to local participants. I urge everyone within the APFCB region to actively participate in your national and regional events.

I wish everyone a happy and successful year ahead!

Best regards

Sunil Sethi,
President APFCB





ASIA-PACIFIC FEDERATION FOR CLINICAL BIOCHEMISTRY AND LABORATORY MEDICINE

APFCB Report for 2017

1. APFCB Matters

Ordinary Members

The following National Societies are members of the APFCB:

1. Australasian Association of Clinical Biochemists (AACB)
2. Chinese Society of Laboratory Medicine (CSLM)
3. Hong Kong Society of Clinical Chemistry (HKSCC)
4. Association of Clinical Biochemists of India (ACBI)
5. Indonesian Association of Clinical Chemistry (IACC)
6. Iranian Association of Clinical Laboratory Doctors (IACLD)
7. Japan Society of Clinical Chemistry (JSCC)
8. Korean Society of Clinical Chemistry (KSCC)
9. Malaysian Association of Clinical Biochemists (MACB)
10. Mongolian Association of Health Laboratorians (MAHL)
11. Nepal Association for Medical Laboratory Sciences (NAMLS)
12. Pakistan Society of Chemical Pathologists (PSCP)
13. Philippine Association of Medical Technologists (PAMET)
14. Singapore Association of Clinical Biochemists (SACB)
15. Association for Clinical Biochemistry, Sri Lanka (ACBSL)
16. Chinese Association for Clinical Biochemistry, Taiwan (CACB)
17. Thailand Association of Clinical Biochemists (TACB)
18. Vietnamese Association of Clinical Biochemistry (VACB)

Affiliate Members

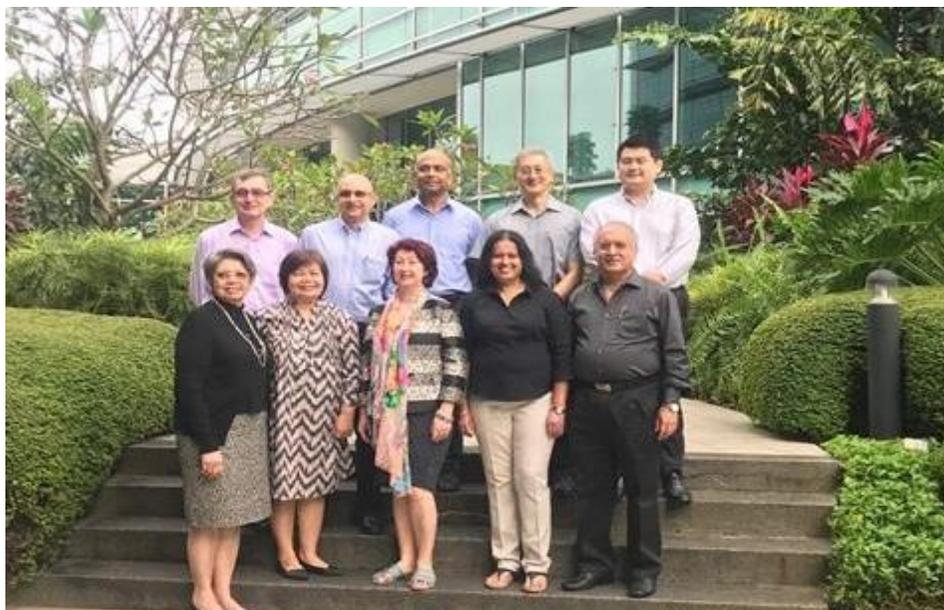
1. Association of Medical Biochemists of India (AMBI)
2. Chinese Association of Clinical Laboratory Management (CACLM)
3. College of Pathologists of Sri Lanka (CCPSL)
4. Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL)
5. Macao Laboratory Medicine Association (MLMA)
6. Nepalese Association for Clinical Chemistry (NACC)

Corporate Members

1. Abbott Diagnostics
2. Beckman Coulter
3. Becton Dickinson
4. Bio-Rad
5. Diasys Diagnostic Systems, GmbH
6. Guangzhou Wondfo Biotech Co
7. Koprana Laboratories Ltd
8. Ortho-Clinical Diagnostics
9. Randox Laboratories

11. Roche Diagnostics
12. Sekisui Chemical Co Ltd
13. Shenzhen Mindray Bio-Medical Electronics Co Ltd
14. Siemens Healthineers
15. SNIBE (Shenzhen New Industries Biomedical Engineering Co Ltd)
16. Sukraa Software Solution Pvt Ltd
17. Sysmex
18. Technidata Medical Software

2. Office Bearers and Chairs of Standing Committees



1) Executive Board

President	Sunil Sethi (Singapore)
Immediate Past President	Leslie Lai (Malaysia)
Vice-President	Sunil Sethi (Singapore)
Secretary	Endang Hoyaranda (Indonesia)
Treasurer	Leila Florento (Philippines)
Corporate Representative	Alexander Wong (Siemens)

2) Chairs of Standing Committees

Communications(C-Comm)	Praveen Sharma (India)
Congress and Conferences (C-CC)	Elizabeth Frank (India)
Education & Laboratory Management (C-ELM)	Tony Badrick (Australia)
Scientific (C-Sci)	Sam Vasikaran(Australia)

3. Memorandum of Understanding (MoU) between IFCC and APFCB

A renewed MoU was signed in March 2017 between the Presidents and Secretaries of both organisations. A new clause in the MoU included the election of an APFCB official within the Executive Board of the IFCC. At the APFCB Council Meeting in Taipei, Taiwan in November 2016, it was resolved that the best suited person for this role was the elected APFCB President. The inaugural APFCB representative in the IFCC EB is Sunil Sethi and his term is for three years from Jan 2018– Dec 2020.

4. Annual IFCC grant

The IFCC continued to support the APFCB with CHF 10,000 in 2017. Funds were disbursed into the APFCB Philanthropic Fund. These funds are used exclusively for support of travel awards for young scientists to attend conferences to present their research and for support of educational activity to the less developed countries within the APFCB.

5. WASPaLM–APFCB MoU

A renewed MoU was signed in November 2017 between the Presidents of both organisations. The MoU sealed the close relationship between the organisations and underscored the importance of supporting each other during scientific and educational events. An APFCB scientific symposium entitled Informatics and Laboratory Results, was part of the WASPaLM programme and was conducted immediately after the MoU signing ceremony.

6. Education and Laboratory Management Committee (C–ELM)

Chair: Dr Tony Badrick (Australia)

Committee

The Committee has been restructured in 2017/18 with each member given a responsibility for a component of the broad range of activities undertaken by the C–ELM. The Committee comprises the following: Environmental– Lia Gardenia Partakusuma (Indonesia); Website development/Interpretative Comments– Tze Ping Loh (Singapore); Vietnam Course – Ronda Greaves (Australia); MACB Course– Elina Raja (Malaysia); Needs Survey of members– July Kumalawati (Indonesia); Phlebotomy audit– Endang Hoyaranda (Indonesia); Lean Vietnam–Jozi Habijanac (Roche Corporate); Quality Control/Sigma training – Amit Manjure (Siemens Corporate).

A. APFCB Travelling Lecturer for 2017 and 2018

Dr Elina Raja, President of the Malaysian Association of Clinical Biochemists (MACB) was appointed APFCB TL for 2017. Her first engagement will be at the 3rd Annual Scientific Conference in Colombo, Sri Lanka on 15–17 March 2018. The title of her presentation is Drugs of Abuse Testing – Past, Present and Future.

B. MACB–APFCB Chemical Pathology Course, Kuala Lumpur, Malaysia 7–8 September 2017

This was the second in the series of the Malaysian Association of Clinical Biochemists (MACB) – APFCB course. There were about 90 participants at the APFCB–MACB Chemical Pathology Course held in KL over two days in September. There were more people who wished to attend but were unable to be accommodated in the allocated room. There were approximately 60 attendees at the inaugural course. The program follows a curriculum based on the AACB– MAACB qualification and aims to cover all the material over three years.



The course is aimed at a section head in a major teaching hospital in terms of content and covers both clinical and technical aspects of clinical chemistry. The program consists of a series of lectures and case studies with significant notes given to the attendees.

There were 2 external speakers but the majority of the presenters were local pathologists and scientists which is in keeping with the aim of making this an MACB activity eventually. The course is linked to a Malaysian government Scientist career pathway and certification project and will be the basis of a postgraduate course which will run next year.

MACB-APFCB Chemical Pathology Course Program 2017

Time	Session - Thursday 7/09/2017	Speaker
08.45 – 09.00	Welcome and overview	MACB President
09.00 – 09.30	Statistics (method evaluation, reference intervals, MU)	Dr. Tony Badrick
10.00 – 10.15	Tea Break	
10.15 – 11.00	Calcium, Magnesium	Prof. Pavai Sthaneswar
11.00 – 11.45	Potassium and acid base	Dr. Tze Ping Loh
11.45 – 12.30	Investigation of Adrenal disease	Prof. Pavai Sthaneswar
12.30 – 13.00	Tumour markers	Dr. Tengku Norita T. Yazid
13.00 – 14.00	Lunch	
14.00 – 14.30	Automation	Dr. Tony Badrick
14.30 – 15.00	Lipids and CVD risk	Dr. Tze Ping Loh
15.00 – 16.00	Case studies: Cases 1, 2, 3	Dr. Tony Badrick / Dr. Tze Pir

16.00 – 16.15	Tea Break	
16.15 – 17.00	00 Management of PoCT	Chris Lam
Time	Session - Friday 8/09/17	Speaker
09.00 – 09.45	Haemoglobin, Iron and Porphyrins (TB)	Dr. Tony Badrick
09.45 – 10.30	Hematopoietic malignancies and cas discussion	Dr. Mimi Azura
10.30 – 11.00	Tea Break	
14.30 – 15.15	Biochemical Alteration in Diabetic Ketoacidosis	Dr. Siti Balkhis Budin
15.15 – 16.15	Case studies: Cases 4, 5, 6	Dr. Tony Badrick
16.15 – 16.45	Discussion	
16.45 – 17.00	Tea Break and End of course	



C. Pre-Analytical Working subgroup to develop a phlebotomy process Auditor training program

The BD phlebotomy audit program has been successful at reducing pre-analytical error in a number of APAC countries. The aim of this project is to produce an APFCB training course for phlebotomy auditors that could be used throughout the Region, develop a guideline for pre-analytical processes, and organize specialty meetings. An MoU with BD who will assist in the development and delivery of this program was signed in Singapore in late January 2018.

D. Interpretative comments programme

The purpose of these cases and suggested responses is to provide some clinical cases for continuing education. There was wide range of responses with between 15 and 45 participants. The Interpretative Comments program will continue in 2018. Dr Loh Tze Ping, Singapore, will take over the management of this program with an emphasis on basic result interpretation.

E. Development of Material for self-directed learning for QA/QC

The C-ELM will continue to populate the website with suitable material for laboratory staff to learn basic aspects of QA and QC.

F. Roche pre-analytical workshops

The Roche Lean training program will continue for year 2 in Vietnam. There have been 3 courses with over 40 local staff trained. The expectation is that there will be further courses this year. The role of the APFCB is to monitor progress and ensure that projects continue to be completed.

G. Green Practices Survey

To continue to promote green laboratories, a survey of suppliers will be undertaken to gauge green policies with production, distribution and use of environmentally friendly material

H. Vietnam PoCT and Clinical Biochemistry Courses

The work of Ronda Greaves in Vietnam will continue with further workshops in Hanoi and HCMC

I. APFCB Workshop held at the IFCC WorldLab Congress, Durban, South Africa

The APFCB was invited in 2016 to conduct a symposium/workshop at the IFCC WorldLab in Durban, 22–25th October 2017.

The APFCB workshop, entitled Clinical Endocrinology, was held on 23rd October 2017 from 1630 till 1730 h. It covered aspects of clinical endocrinology, including vitamin D and osteoporosis, parathyroid disorders and their investigation, and clinical cases on thyroid and adrenal disorders

Scientific Programme:

Chair: Leslie Lai

Laboratory investigation in the diagnosis and management of parathyroid disorders

Samuel Vasikaran (Australia)

Endocrine cases and data interpretation

Leslie Lai (Malaysia)

Vitamin D to prevent osteoporosis: Critical Levels and mechanisms of action

Howard Morris (Australia)

Although the workshop was the last session of the day and there were four parallel sessions, with 700 registered participants at the congress, the APFCB workshop attracted around 100 participants.

The feedback received from participants was that the APFCB workshop was useful and interesting. The clinical cases were interactive and engaged the participation of the audience. To quote two participants who attended the workshop, the session was a “great event”.

The APFCB is honoured to have participated in the 23rd IFCC WorldLab Congress in Durban, South Africa.

J. APFCB Symposium at WASPaLM, Kyoto, Japan, 20th October 2017

The APFCB conducted an invited Symposium entitled Informatics and Laboratory Results at the WASPaLM Kyoto meeting. There were three speakers:

Sunil Sethi who spoke on Laboratory middleware, process control and result auto-verification; Tony Badrick (co-chair) with the topic Using External Quality Assurance Information and Communications Technology to drive improved Reporting; and, Helen Martin who addressed Critical Risk Result Reporting.

The audience was small but this was true for many of the symposia during the meeting. The audience was enthusiastic. The material presented linked together well and was pertinent and informative. The speakers gave good presentations and the session flowed well and was on time. The venue was very good though some distance from Kyoto where the hotel was located. The activity underscored the importance of the APFCB-WASPaLM relationship.

K. APFCB-AACC Quality Workshops

There is a new collaborative project between APFCB and the AACC. Planning has begun for the Global Laboratory Quality Workshop series, “Adding Value to Patient Care Using Quality Control” in the Asia-Pacific region from August 2018. Workshops in Nepal, Sri Lanka and Philippines are being planned, with a similar pre-congress workshop at APFCB Congress in Jaipur in November 2019.

7. Scientific Committee (C-Sc)

Chair: Sam Vasikaran (Australia)

Committee:

Kiyoshi Ichihara, Chair of Reference Intervals WG,

Graham Jones, Chair of APFCB / WASPaLM Task Force on CKD,

Leslie Lai, Vice Chair and WASPaLM Rep-APFCB / WASPaLM TF CKD,

Ronda Greaves, Chair of Mass Spectrometry Harmonisation WG

Tester Ashavaid (TD), Chair of Pharmacogenetics WG



A. Kiyoshi Ichihara has analyzed reference interval data from participating countries in the APFCB region (India, Nepal, Bangladesh, Pakistan, Malaysia etc.). Measurements were harmonised by the distribution of a panel of sera. The IFCC Committee on Reference Intervals and Decision Limits (C-RIDL) will publish a guidance document for the direct and indirect methods for deriving reference intervals. Clinical decision limits will also be addressed. Available tools: DGKL–Germany [http://www.dgkl.de/PA106975_EN_VAR100?sid=u425284C4lo121].

B. APFCB–WASPaLM TF–CKD. A meeting of the IFCC–WASPaLM Task Force on CKD was held in Athens during EuroMedLab. Several national representatives from the AP region attended. The National Societies are encouraged to liaise with the local clinical Nephrology professional societies. K–DIGO 2013 blueprint should be used for implementation of action plans. http://kdigo.org/wp-content/uploads/2017/02/KDIGO_2012_CKD_GL.pdf

National representation encouraged on both the APFCB–WASPaLM TF–CKD and the IFCC–WASPaLM TF–CKD by applying for corresponding membership.

APFCB will support regional countries which can apply to the IFCC VLP program to invite GJ to visit and speak at local forums/workshops.

There is currently an epidemic of CKD in Sri Lanka. GJ has been invited by the College of Chemical Pathologists of Sri Lanka to speak, hold workshops and meet with nephrologists, at their annual meeting in March 2018.

C. Mass Spectrometry Harmonization Working Group

A survey for 17OHP for serum and plasma was carried out via several national, regional societies/ bodies. Next steps include – technical survey/ recommendations – on minimum volumes, dynamic range of assays, consideration of QC levels, internal standards, EQA and accreditation. Work is in conjunction with the IFCC and AACB. Two abstracts presented (one at ESPE, one at ICPLM 2017).

Publication: Greaves RF, Ho CS, Loh TP, Chai JH, Jolly L, Graham P, Hartmann MF, de Rijke YB, Wudy SA; Working Group 3 “Harmonisation of Laboratory Assessment” European Cooperation in Science and Technology (COST) Action BM1303 “DSDnet” . Current state and recommendations for harmonization of serum/plasma 17–hydroxyprogesterone mass spectrometry methods. Clin Chem Lab Med 1998 Feb 3. Epub ahead of print. Plans are afoot for initiating and international external quality assessment program for LC–MSMS based analysis of steroid panels starting with 17–OHP, to be done in collaboration with European and Australian external QA programs.

Ronda Greaves is a member of the new IFCC–ETD and may be an avenue for collaboration with wider laboratory medicine community.

D. Focus on Diabetes Mellitus Decision made at the APFCB EB meeting in January 2018 to focus the efforts of C–Sc improving the quality of laboratory services in the region for the tests related to diabetes mellitus in order to improve diagnosis, monitoring and management of the disease – with activities involving a survey on HbA1C diagnostic cut offs, PoC versus mainframe testing, and possible APFCB region–wide accuracy–based A1C PT programme.

8. Communications Committee (C–Comm)

Chair: Praveen Sharma (India)

The Chair of the Communications

Tester Ashavaid

Dr Purvi Purohit

Dr Purvi Purohit

General and Case Studies Editor

General and Case Studies Editor

Web Editor

Assistant Editor



A. APFCB e-News

The APFCB e-news is available free online for all and this has ensured wide reach of the APFCB e-News to all members at no additional cost. It covers:

APFCB activities

Activities of member societies

Features (including special mention of any outstanding work)

Scientific articles by members

Scientific articles by corporate members

The APFCB e-News was published annually from 2013 to 2015. In 2015 it was decided that the APFCB e-News shall be published twice a year as Issue- 1 and 2 in an effort to cover more regional activities. Since 2016 there is regular publication of the 2 issues of APFCB News. For the current year APFCB News 2017 (Issue-1) is already online covering the activities of member societies in the first half of this year. The second issue is under preparation and covers major activities of the member societies of the second half of the year 2017.

B. APFCB Website

The Chair of the Communications Committee was charged with the responsibility of launching the APFCB website and its coordination, maintenance and improvement (www.apfcb.org). The site was successfully launched on 1 Nov 2011. Dr MVR Reddy (India) had been assigned the responsibility of being the web editor. In the year 2016 Dr Purvi Purohit succeeded Dr MVR Reddy as the web editor.

The website is regularly updated with comprehensive information on the organization and activities of APFCB and its member societies and latest announcements of conferences and workshops of member societies. Access is made available through the website to the ongoing Scientific, Education and Laboratory Management Committee programs of APFCB as well as the activities of the Communications and Congress Committee.

With the renewal of the website maintenance contract, there have been progressive updates in the website. There is automatic data archival of all the website pages. Further, all the issues of the APFCB News are now available in two formats, PDF and E book format. APFCB also has a YouTube channel with informative videos available. This was made in collaboration with Roche and is now successfully launched in December 2017.

The channel can be searched on YouTube Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine. There is also a photo gallery of relevant events. The website is also a source of information on the APFCB Congress and regional meetings as well as the APFCB Travelling Lecturer program as well as future events. The APFCB e- News and annual reports are conveniently published online on this platform, making them readily available to all members. It also gives access to the APFCB webinars.

C. Public Relations

A power point presentation on the APFCB, its members and its activities is updated regularly by the corporate representative at the Executive Board, Dr Alexander Wong, from Siemens. This Power Point presentation is ready for use at member society conferences and at regional and international meetings to promote the APFCB.



9. Congress and Conferences Committee (C-CC)

Chair: Elizabeth Frank (India)

A. Auspices

One of the functions of the APFCB C-CC is the award of auspices of the APFCB for scientific meetings. The provision of auspices is mutually beneficial: the APFCB lends its prestige to a meeting which should help it attract greater participation and in return the APFCB benefits from greater name recognition among the participating laboratory scientists.

In 2017, APFCB auspices were provided for the following meetings:

1. College of Chemical Pathologists, Sri Lanka, Annual Academic Session, 24–25 February 2017.
The Iranian Association of Clinical Laboratory Doctors (IACLD),
2. 10th International & 15th National Congress on Quality Improvement in Clinical Laboratories, 20–23 April 2017, Tehran, Iran
3. The 9th Scientific meeting and Chemical Pathology Course, July 2017, Vietnam.
4. 2nd APFCB-SACB-Siemens Specialty Meeting on Laboratory Excellence, 29 September 2017, Singapore
5. Korean Society of Laboratory Medicine, 58TH Annual Meeting, LMCE 2017, 18–20 October, Seoul, South Korea
6. Association of Medical Biochemists of India, 25TH Anniversary Silver Jubilee AMBICON, 15–19 November, Mysuru, India
7. 44th National Conference of Association of Clinical Biochemists of India (ACBICON 2017), 3–6 December 2017, Lucknow, India
8. Roche Efficiency Days (RED), 30 Nov–1 Dec, Taipei, Taiwan

10. Corporate Member's Report by Dr Alexander Wong (Siemens Healthineers)

A. Corporate Membership Update

Year	New corporate Members added	Corporate Members Rescinded
2014	Nil	
2015	Wondfo Biotech SNIBE Diagnostics	Nil
2016	Nil	PM Separations
2017	Nil	

B. Promoting APFCB Membership

Corporate Representative will continue to promote the benefits of APFCB Corporate Membership to other companies.

C. Receivables Reconciliation from Corporate Members

Efforts have been made to reduce the amount receivables from Corporate Members. Corporate members such as BD, Bio-Rad have paid their overdues, and Randox has recently responded favourably to settle their outstanding payments. Corporate Representative to follow-up with treasurer on the amounts receivables overdue that is payable to APFCB.



D. Corporate Member Activities

Appointment of Corporate Representatives to APFCB Committees The following Corporate Representatives have been nominated to the respective Committees –
 C-ELM – Ms Jozica Habijanac (Roche)
 C-ELM – Mr Amit Manjure (Siemens)
 C-SC – Mr Tan Swee Jin (Sysmex)

E. APFCB–Corporate Memorandums & Agreements

More Corporate Members are amenable to sign non-binding agreements with APFCB in order to better define the scope and activities for which each Corporate Member would like to collaborate with APFCB over a medium term. This is a very encouraging trend, and can be an effective mechanism to promote more to Corporate Members in order to facilitate closer collaboration.

APFCB–Abbott Event Partnership Agreement
 APFCB–Roche Collaboration Agreements
 APFCB–BD MOU on Pre-analytical
 APFCB–Siemens MOU on QC/Sigma training program (in discussions)

F. APFCB Auspices for Corporate Events

Auspices were granted to 2 meetings held in the second-half of 2017. Both meetings were well-attended and post-event reports have been submitted to the APFCB for records.

2nd APFCB–SACB–Siemens Specialty Meeting, held in Singapore
 Roche Efficiency Days (RED) 2017, held in Taipei.

G. Launch of APFCB YouTube Channel

Roche Diagnostics have offered support and assistance to launch an official APFCB YouTube Channel in order to manage our scientific online contents. The following members are tasked to work on the project, with a progress update expected on 26 Jan 2018

APFCB – Praveen Sharma, Alex Wong
 Roche – Jozica Habijanac, Shruti Bose

H. Update on APACMed Code of Ethics

Corporate Representative highlighted the recent changes made to APACMed code, with effect from 1 Jan 2018. These changes will mainly affect Corporate Members who are under APACMed (<http://www.apacmed.org/join/current-members/>)

APACMed Corporate Members will NOT be allowed to –Invite HCPs directly as speakers or as participants for all future APFCB Congresses and Events, but will need to go through the Congress organizers for nominations, for which the Congress organizers will cover all travel arrangements and expenses.

These costs may be recovered through an educational grant that can be paid on an agreed lump sum or through reimbursement of receipts.

Corporate Members are still allowed to –Propose speakers for 3rd party educational event if approached by event organizers but cannot influence their selection/decision, nor make any direct travel and logistical arrangements.

Invite Corporate employees to speak at 3rd party educational event where speaker's slot is offered as part of the sponsoring package.



Purchase satellite symposia* (e.g. lunch symposia) packages and to determine the content of these satellite symposia including selection of speaker and payment of speaker's honorarium, travel, accommodation. Free tickets obtained from event organizers as part of the educational grant can be offered to HCOs (but not to HCPs).

Organize their own Corporate Workshops/symposia independent of any other event organizers

I. Corporate Members Briefing on APFCB Congress 2019, Jaipur

A Corporate Members Briefing session was organized on 26 Jan 2018 in Singapore, to Congress Organizing Committee Chair Prof Praveen Sharma gave an update on the preparations for the APFCB Congress 2019 to Corporate Members. Corporate Members were impressed by the venue, facilities, and flight connectivity options.

J. 2nd APFCB-SACB-Siemens Specialty Meeting on Laboratory Excellence

Date: 29 September 2017

Venue: Carlton Hotel, Singapore

APFCB, SACB, and Siemens continued their joint collaboration to organize the second series of Specialty Meetings in Singapore, with the topic on "Laboratory Excellence". The event saw a total of 202 participants from restructured hospitals, commercial laboratories, polyclinics, and clinical trial organizations across Singapore, as well as participants from neighboring countries Malaysia and Indonesia. Consistent with the first series, the organizers capitalized on speakers from various organizations - Health Sciences Authority Singapore, as well as College of American Pathologists (CAP faculty, to share their valuable knowledge and experience to the audience.

One interesting aspect of the event was also the use of a real-time Q&A mobile app for better interactivity with the audience. Over 40 questions were posed by the participants across the 2 Q&A panels, and the faculty answered questions that had garnered the most up-votes. Participants thoroughly enjoyed the use of the digital media platform (Pigeon Hole Live) to liven up the Q&A sessions, as did the speakers themselves.



11. Special Events

Association of Medical Biochemists of India, 25TH Anniversary Silver Jubilee
AMBICON, 15-19 November, Mysuru, India

Report of attendance by Endang Hoyaranda, Vice-President, APFCB

The AMBI annual conference 2017, which commemorates the Silver Jubilee of AMBI was chosen to be held in Mysore, Karnataka State, South India. AMBI was established in 1992, and was held in the beautiful facilities of the Lalitha Mahal Palace Hotel, which was built in 1921 during the Kingdom of Mysore.

The conference was attended by more than 200 participants, mainly Biomedical doctors from all over the country. Unfolding new facets of Medical Biochemistry: The bridging of Academia and Clinics, was chosen as the theme of the conference this year. This theme was well represented by the lectures addressed during the conference.

A memento from APFCB congratulating AMBI for their Silver Jubilee, was presented to the President of AMBI, and an address from APFCB was delivered, as follows: On behalf of the Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine, I congratulate the Association of Medical Biochemists of India on this historical 25th anniversary.

The need for professional and scientific societies to be heard in public is increasing these days. This is especially important in the field of medicine, in this era of the P4 principles, where health is regarded not only as mitigating disease, but also preventing and predicting disease, personalizing of actions and participation of all stakeholders. It is the era of disruption, where changes are happening at a very high pace, where it may destroy when men are not aware of the consequences brought by changes. Professional and scientific societies are at a very strategic position to make the necessary changes, even to be in the disruptive process for the enhancement of healthcare.

It is therefore also very strategic and timely to have the theme for this year "Unfolding new facets of Medical Biochemistry: The bridging of Academia and Clinics"

This anniversary will mark a very important milestone reached, and also creates an optimism to go for another silver jubilee to reach your golden jubilee.

All members, especially you who have served to make AMBI become the best what it may possibly reach, will then look back and say that all of you must have done something good in your life, for your community, for the patients, for your country, and for mankind.

Congratulations from all of us at the APFCB board and committees, may you have a successful conference and a bright path ahead.

As invited speaker, I delivered a lecture in a symposium dedicated to Risk management in laboratory medicine, the topic of my lecture being Medical Laboratory Risk Management in Action.



This topic covered risk management not only from the quality control/assessment point of view but also from other various aspects in the endeavor to obtain the highest patient safety as well as sustainability of the laboratory viewed from various other aspects.

AMBI President, Shanti Naidu, and the whole board as well as other attendees, showed wonderful hospitality during the conference.



SACB Council members and speakers at the Annual Scientific Meeting.

12. The 15th APFCB Congress 2019

The 15th APFCB Congress 2019 is being hosted at Jaipur (India) in the winters of November 2019 under the dynamic leadership of Prof Praveen Sharma. The event is already having an active website hoisted and a mobile app since 2016.

The congress committees have been finalized and registration shall be open shortly for the mega event. The corporate meeting for sponsorship is scheduled on 26th January 2018 followed by Executive board meeting at Singapore.

The announcement of the congress is hoisted on the APFCB Website and is linked to its brochure, helping disseminate important information about this mega event.



Laboratory Medicine-Innovation and Integrati

**15th Asia-Pacific Federation For
Clinical Biochemistry and
Laboratory Medicine Congress**

**17th - 20th November, 2019
JECC, Jaipur, India**



Congress Website



Congress website is live with the details of the venue, city & organizing committee, online registration module is also integrated on the same.



<http://apfcbcongress2019.org>

Report compiled by Sunil Sethi (President), with inputs from Leslie Lai (Immediate Past-President), Endang Hoyaranda (Vice President), Helen Martin (Secretary), Alexander Wong (Corporate Representative), Tony Badrick (Chair C-ELM), Sam Vasikaran (Chair C-Sci), Praveen Sharma (Chair C-Comm), Elizabeth Frank (Chair C-CC),

24 February 2018



IFCC-Task Force Young Scientists (TFYS)

IFCC World Lab, Durban, 22–25 Oct 2017

25th Oct 2017: The well-organized IFCC&LM WorldLab congress in Durban was a new occasion to feature young clinical laboratorians from African countries and other countries to share their experiences. A YS symposium featuring YS from the IFCC Task Force for YS followed by the more experienced Ms Serah Plaifa and Prof Rajiv Erasmus and moderated by Dr Graham Beatsall, focused on ISO accreditation and quality assurance. We live a world of globalization and accreditation of clinical laboratories may be an experience we all share during our daily practice. The information presented in the symposium were of great value to those who wanted to improve their knowledge about external quality assessment & internal quality control thanks to Dr Miljan Savkovic, followed by Dr Guilaine Boursier who shared with the audience the French experience of mandatory ISO accreditation. We have also learned that WHO is providing a national external quality assessment to South Africans laboratories and that the South African National Accreditation System (SANAS) is one of the three national accreditation bodies of the African continent. Almost one hundred YS have attended the symposium and so had an opportunity to interact with the workshop speakers and to network at the conclusion of the session thanks to the dynamism of Prof Vanessa Steenkamp. Such a nice symposium would not be possible without the support of the IFCC&LM and all our sponsors that have provided scholarships and travel awards for YS. We would like to deeply thank IFCC&LM, Jocelyn Hicks, Roche Diagnostics and the scientific societies of Australia, Canada, France, Germany, Malaysia, Saudi Arabia, UK and USA for having made possible this symposium dedicated to YS. We are pleased that this successful event has brought in new energy and insights into our TF-YS projects and once again helped us to make global connection.

BY:

*Dr Guilaine Boursier & Dr Pradeep K Dabla
IFCC-TFYS*

ACBICON – 4–6 Dec 2017, KGMC, Lucknow, India

2017 Dec 4th & 5th : IFCC-TFYS was able to organize educational symposium and 3rd ACBI-IFCC TF-YS Award supported by organising committee of 44th National Conference of ACBICON-2017, King George Medical College, Lucknow, India. The symposium was organized successfully under the theme of “*Leadership Skills: Essential for Career & Organisational Success*” on 4th Dec.

The chair sessions were Prof Maurizio Ferrari (President IFCC) Dr Bernard Gouget (IFCC NC Chair) and Dr Elizabeth (APFCB-CC Chair).

Today, it's not enough to be a great scientist. Conversely, science excellence combined with leadership is needed vitally.

It seems that there is a gap of leadership skills among young scientists because science education focuses on individual achievement whereas innovation requires collaboration.

First hand experience of leadership must come from place of education then secondly at the workplace environment. So this symposium was focused to share experience and education from IFCC, APFCB & ACBI leaders for young scientists. Prof Howard Morris initiated giving insight to challenges & responsibilities while explaining how to prepare for leadership.



These challenges are an incitation to rise to another level, to test yourself and improve in the process. Prof Tomris Ozben continued while explaining contribution of women in development of Turkey citing examples. She stressed onto the strong presence of women and their contribution in society. Dr Praveen Sharma described how critical thinking is important for building good judgment. Critical thinking is self-disciplined, self-monitored and problem solving thinking. Dr Pradeep K Dabla said effective team working and leadership is an essential ingredient for organisational success. Successful teams can help transform an organisation, increase outputs and deliver on organisational objectives. At the end, session was made open for young scientists and participants to interact with world leaders to solve their queries. IFCC-TFYS is thankful to organizing committee ACBICON-2017 especially to Prof Abbas Mehdi and leaders IFCC, APFCB & ACBI for sharing their views and making an effort for understanding of "Leadership Skills" for future leaders.

The "ACBI-IFCC TFYS" Young Scientist Awards- 2017 was conducted on 5th Dec 2017. The 5 young scientists from pan India covering all zones of ACBI were selected from number of requests submitted on the basis of their research work. The 5 selected young scientists presented their original research papers and were awarded with cash prize INR-5000 and certificate supported by organising committee ACBICON-2017. The session was chaired by Prof Rajiv Ranjan Sinha, Secretary ACBI and Dr Pradeep K Dabla, Chair, IFCC-TFYS. Selected 5 young scientists presented their research work were Dr Neelam Lakha, Dr Anchal Trivedi, Dr Joseph, Dr Rakchna and Dr Abhra Ghosh. These awards created a good example of advocacy for young scientists and an opportunity for standalone session. IFCC-TFYS is thankful to all our senior members IFCC, APFCB, ACBI and Chair Organising Committee ACBICON 2017 Prof Abbas Maehdi for their immense support in conducting TFYS sessions successfully

BY: Dr Pradeep K Dabla, IFCC-TFYS





Australasian Association of Clinical Biochemists (AACB)

Activity report for July – December 2017 by Helen Martin, Past President AACB

Current Council members

President: Mr. Peter Ward
 Vice President – Finance, Planning and Branches: Mr. Peter Graham
 Vice President – Education and Training: Dr Tina Yen
 Vice President – Scientific and Regulatory Affairs: Mr. Robert Flatman
 Vice President – Media and Communications: Dr Peter Vervaart
 Chair, Board of Examiners: Mr. Greg Ward

Branch Representatives to Council

New South Wales & Australian Capital Territory (NSW&ACT): Mr. Peter Ward
 New South Wales & Australian Capital Territory (NSW&ACT): Mr. Peter Ward
 New Zealand(NZ): Mr. Roger Barton
 Queensland (QLD): Mr. Steven Weir
 South Australia and Northern Territory (SA&NT): MS Aida Mulabecirovic
 Tasmania (TAS): Mr. Robert White
 Victoria (VIC): Ms Intissar Bittar
 Western Australia (WA): Mr. William McConnell
 CEO: Dr Kevin Carpenter

Council meeting

AACB Council meets face to face for the second time this year on Sunday 10th September just prior to the commencement of the Annual Scientific Meeting in Melbourne. This meeting was mainly a business meeting with reports from each Branch and from the various activities.

National Meetings

55th Annual Scientific Meeting 12th – 14th September

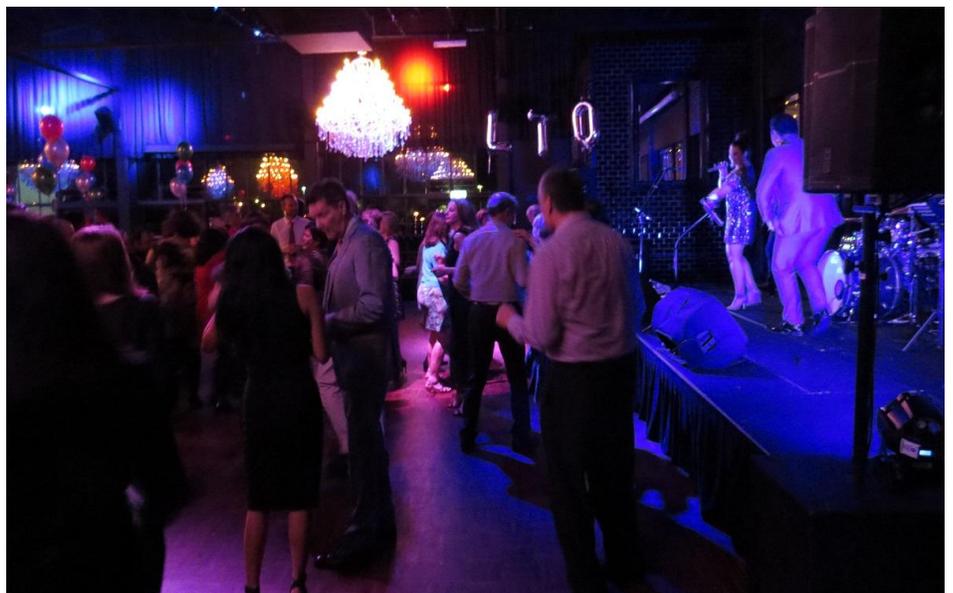
The Annual Scientific Meeting is typically the highlight of the last half of the year and this year was no exception. Over 370 attendees enjoyed three days of outstanding scientific presentations linked by theme “Time Sensitive Testing”. Alongside the formal program there were 88 posters to view and an extensive Industry Exhibition with 40 booths and 28 organizations to visit.

We are extremely grateful to all who contributed but special thanks go to the Principal Sponsor: Department of Health and our Major Sponsors: DiaSorin and Siemens Healthineers.

Rather than presenting speakers with gifts, for several years now AACB has made donations on their behalf to a selected charity; in keeping with the Conference theme, the organizing committee chose the Royal Flying Doctors Service to receive this year’s donations.

Another recent tradition is the Thank You function for Sponsors of the Annual Scientific Meeting and Members and Fellows of the Association. This is held on the evening prior to the formal opening of the meeting and allows Sponsors and senior members of the Association to meet and network in a convivial environment.







Program Summary

Tuesday 12th September

Morning sessions

The opening plenary, the David Curnow Plenary Lecture, was delivered by Prof Hans Schneider; on the important topic of Critical Result Communication. Prof Schneider discussed the differences between critical tests and critical results and highlighted the current variation between laboratories in our practice in this area. The AACB has established a working work in partnership with the RCPA to harmonize critical result decision limits and reporting practices.

The opening plenary was followed by concurrent symposia on ICU testing and Emergency Medicine in Pregnancy.

Afternoon sessions

Began with concurrent symposia providing an Update in Bone and Mineral metabolism which was sponsored by DiaSorin and a symposium by the RCPA QAP on Quality Matters. The final session for the day was a plenary lecture where A/Prof Sunil Sethi spoke on Laboratory Response Times – meeting clinical needs. He described impressive protocols from the National University Hospital in Singapore and proposed an equation whereby Value = Quality/Cost.

Wednesday 13th September

Morning sessions

The day began early with breakfast and concurrent “hot-topic” poster sessions each containing 6 excellent short presentations before the plenary session on cardiac troponin. Dr Philip Tideman presented an Overview of the Guidelines for Assessment of ACS including latest algorithms for rule-in of Type I and Type II MI and later on PoCT Troponin – It's all in the Timing. Dr Tideman discussed the latest Acute Coronary Syndrome guidelines and decision limits for all generations of laboratory troponin assays as well as point-of-care assays. Between Dr Tideman's presentations, Dr Christina Trambas spoke on Matters of the heart: sex-dependent differences in cardiac troponin.

She highlighted gender differences that need to be considered in the age of highly sensitive assays; normal values are lower for women than men due to a smaller myocardium and following an acute myocardial event women typically, present later, with more nebulous symptoms and have a lower peak troponin concentration. Two concurrent sessions each comprising six submitted orals completed the morning. Like the hot topic poster sessions, the oral sessions provide an excellent opportunity to see the outcomes of many individuals work to improve testing and workflows in their laboratories.

Afternoon sessions

Began with concurrent symposia on Endocrine Crisis and Neonatal testing. And was followed by the fourth plenary delivered by Prof Jeffrey Lipman on Sepsis vs. Inflammation – does this patient need antibiotics? His topic was particularly apposite since it was delivered on World Sepsis Day. Dr Lipman discussed the dilemma of increased mortality from sepsis if antibiotic therapy is delayed versus the certainty that antibiotic resistant strains of bacteria begin to be produced by the human gut within 24 hours of commencing antibiotic therapy.

The conference dinner on Wednesday evening at The Park on Albert Park Lake was also a 10th Birthday Celebration for Lab Tests on Line (LTO) and the venue for the awarding of an AACB Outstanding Service Medallion to Dr Bruce Campbell who has been the Chief Editor and major contributor of content for LTO. In addition to fine food, wine and networking delegates enjoyed a presentation from a guest speaker from the Department of Health. Mr. Paul Carroll, Program Manager, Diagnostic Solutions, Clinical and Consumer Engagement and Clinical Governance spoke on 'My Health Record & LTO. The AACB is very proud to hold the Australasian license for Lab Test on Line, the go-to website for accurate consumer information on laboratory tests.

Thursday 14th September

Morning sessions

Fortunately there were no breakfast sessions following the wonderful conference dinner; instead the day began with two concurrent symposia, one on drugs the other a RCPA QAP Update session. These were followed by the fifth plenary delivered by Dr Mario Plebani on Detection and prevention of errors in the time-sensitive testing situation. Dr Plebani is a world-renowned for his work in identifying laboratory errors.

Afternoon sessions

As usual delegates had a difficult choice between concurrent symposia from the Scientific and Regulatory Affairs Committee, where four senior speakers presented their views on the year's most pivotal papers and from the RCPA QAP Patient Report Commenting Committee presented clinical cases. Delegates then united again for the final plenary delivered by Prof Olaf Drummer on Drug Driving! From roadside to emergency to coroner. Prof Drummer discussed the changing patterns in drug use in drivers involved in fatal vehicle crashes over time, the advent of newer psychotropic drugs and the outcomes of law enforcement testing strategies.



Pre congress satellite meetings**Monday 11th September – Protein electrophoresis workshop**

This was a full day workshop that addressed outstanding issues from the 2012 publication by Jill Tate et al “Recommendations for standardized reporting of protein electrophoresis in Australia and New Zealand.” Ann Clin Biochem. 2012 May;49(Pt 3):242–56. Reporting of small bands and monoclonal bands migrating in the beta region were identified as needing more work to be harmonized. It was agreed that a survey and sample exchange be conducted to gather data regarding current practice in these areas. An update on the use of free light chain assays was also presented.

The meeting was fortunate to have presenting Dr Peter Mollee, Head of the Myeloma and Amyloidosis service for Pathology Queensland and Dr David Keren, Professor of Pathology at the University of Michigan.

Post congress satellite meeting**Friday 15th September – QC workshop number 5**

This was the 5th in the series of QC workshops; these events are the brainchild of Dr Tony Badrick and focus on presentations designed to improve QC understanding and practice in the routine laboratory. This workshop had sessions including QC for therapeutic drug assays, QC for low volume assays, Measurement of Uncertainty and Method Evaluation – what do NATA expect and Using Patient based QC procedures such as the Average of consecutive normal patients (AON).

Webinars

October: Busulfan – analytical and pharmacological aspects of testing. Sean O’Halloran

November: EQA. Interpretation of RCPA QAP reports. Mr Peter Graham

December: Derivation of Indirect Reference Interval. Dr Tze Ping Loh

Branch Activities**New South Wales and Australian Capitol Territory**

July: Age-related changes in TSH and PTH: Facts and Philosophies’ –Dr Chris Farrell, and Annual General Meeting.

August: Back to Basics Cases: Presentations by Chemical Pathology Registrars.

October: Regional meeting on the beautiful Central Coast. Focus on HbA1c. Presentations from various perspectives – clinical, Dr Owais Chaudhri, laboratory, Mr David Hughes, POCT manufacturer, Alere.

November: Tribute for Professor Geoffrey Kellerman.

An evening to celebrate the retirement of one of the founding members of the AACB.

New Zealand

June 1st scientific education seminar “The Eclectic World of Clinical Chemistry was held in Auckland

Full day meeting with sessions on Troponin, mass spectrometry, point of care testing, and cases presented by young scientists.

November: Roman Lecture: “The Paraprotein – An Enduring Biomarker” – Jill Tate
Protein electrophoresis workshop. “How NOT to miss small monoclonal bands?” – Jill Tate and Sebia technical experts.

Many a small thing in chemistry... physiology of reference intervals, End of cycle reports, CVD and Familial hypercholesterolemia, and several case studies presented by our junior scientists.

Queensland

July 15–16th Weekend meeting Saturday 15th

Working in the main automated laboratory: dead end or Land of Opportunity – Robert Flatman

Reproductive Hormones – the whole gamete – Kate Driver

Liver function and testing – Dr Lee Price

The role of Chemical Pathology in the diagnosis of Pheochromocytoma and Carcinoid tumours – Brett McWhinney

Calcium Phosphate regulation and measurement – Steven Weier

Free light chain analysis – Matthew Burke

Case studies from Pathology Queensland and Mater Pathology

Industry presentations from Abbott Diagnostics, Beckman–Coulter and Bio–rad.

Sunday 16th

A whole laboratory approach to QA – Dr Renze Bais

Standardisation and Harmonisation – David Hughes

The Hypogonadal Male – Greg Ward

PLGF and current research applications – Dr Helen Sherell

The case for non–fasting lipids – Dr David Kanowski

Case studies from QML and Sullivan and Nicolaides

Industry presentations from Diagnostic Solutions and Diasorin

August: Roman Lecture: “The Paraprotein – An Enduring Biomarker” – Jill Tate

November: End of year celebrations and Trivia night

South Australian and Northern Territory

July: OGM and quiz night. Teams competed for “The Golden Pipette”. Three rounds of questions taken from AACB publications, General Science and Topical Knowledge were asked and after a tight contest, the team from SA Pathology Team was triumphant.

August: “Immunodeficiency” – Dr Tatjana Banovic

October: “New Cholesterol–lowering agents.” – Prof Peter Clifton

November: “Lessons from the Value Based Medicines Program” – Prof Libby Roughhead.

December: Christmas Celebrations, a tour of the Women’s and Children’s Hospital Pharmacy and presentation from senior Pharmacist Ulrik Lorenzen

Tasmania

July: Weekend meeting, 15–16th July at the White Sands Estate in Ironhouse Point

Victoria

July: Roman lecture “The Para protein, an enduring biomarker” – Jill Tate

August: “Target setting for the RCPAQAP and other short stories” – Dr Lindsey Mackay



October: "When Ebola comes to Town" Ray Czajko

November: "Poster Session from Melbourne Annual Scientific Meeting" – various presenters

December: Christmas Meeting and Trivia Night.

Western Australia

July: OGM

October: "Poster Session from Melbourne Annual Scientific Meeting" – Bill McConnell and Kelvin Oh

November: End of year celebrations and quiz night

Publications

Clinical Biochemist Newsletter is published quarterly and as the name implies, is principally intended to keep the membership informed about AACB activities. The CBN also offers education content in the form of case presentations and journal article reviews. This semester there were issues in September and December

The Clinical Biochemist Reviews is a peer reviewed journal of review style articles

Volume 38 (iii) contained the following articles:

1. Enhancing the Clinical Value of Medical Laboratory Testing – Kenneth A Sikaris
2. Australasian Guideline (2nd Edition): an Annex to the CLSI and UK Guidelines for the Performance of the Sweat Test for the Diagnosis of Cystic Fibrosis – John Massie et al
The Role of Wnt Signalling in Angiogenesis – Jun Jun Olsen et al





Hongkong society of clinical chemistry (HKSCC)

HALF-YEAR REPORT OF 2017

Education activities for the year carried on with presentations by distinguished academia and scientists. One scientific meeting was organized in the second half year of 2017. This evening seminar focused on the following 3 hot and practical topics for young members:

1. A Series of Interesting Pseudohyperkalemia Cases by Dr Jason Tsang, Chinese University of Hong Kong
2. Biotin Interference In Diagnostic Tests by Dr Candy Ng, Princess Margaret Hospital
3. Persistent hCG After Evacuation of Molar Pregnancy – How Worried Should We Be by Dr Rainbow Cheung, Queen Elisabeth Hospital

The event was well attended by over 140 members and guests.

Evening seminar on 30 November 2017: Dr Jason Tsang, Dr Candy Ng and Dr Rainbow Cheung









HIMPUNAN KIMIA KLINIK INDONESIA
INDONESIAN ASSOCIATION FOR CLINICAL CHEMISTRY

IACC Activities 2017 for APFCB News Semester 2

Pediatric Seminar

IACC cooperated with Indonesian Association of Pediatrician (IDAI) held a seminar on pediatric laboratory medicine. The topic of the seminar is ADVANCING CHILDREN'S HEALTH THROUGH PEDIATRIC LABORATORY MEDICINE in Le Meridien Hotel Jakarta, 29 September 2017.

Time	Agenda & Speakers
07.30 – 08.30	Registration
08.30 – 08.35	Opening speech by Chairman of HKKI
08.35 – 09.00	Pre Analytical Aspects in Pediatric Laboratory Medicine – Elsa, SpPK, dr
09.00 – 09.25	Newborn screening improving children's health –Frans Sardi, SpPK, dr
09.25 – 09.50	Closing the Gaps in Indonesian Pediatric Reference Interval – Miswar Fattah, Dr, MSi.
09.50 – 10.05	Discussion
10.05 – 10.20	Coffee break
10.20 – 10.45	Neonatal sepsis – Dalima AW Astrawinata, SpPK, M.Epid, dr
10.45 – 11.10	Neonatal Jaundice – Prof. Marzuki Suryaatmadja, SpPK(K), dr
11.10 – 11.35	Inborn error of metabolism diseases – IDAI
11.35 – 11.50	Discussion
11.50 – 12.20	Lunch symposia (PT Tawada Health Care)
12.20 – 13.30	Lunch
13.30 – 13.55	Thalassemia – Iswari Setianingsih, PhD, SpA, dr
13.55 – 14.20	Hemofilia – Prof.Rahajuningsih S, SpPK(K), dr
14.20 – 14.45	Hormonal aspects in adolescents – IDAI
14.45 – 15.00	Discussion
15.00 – end	Coffee break





Dr. July Kumalawati, SpPK DMM, Dr. Thyrza L. Darmadi SpPK, Dr. Frans Sardi SpPK, Dr. Elsa S, SpPK and Dr. Miswar Fattah took picture after session

1. Seminar & Workshop

IACC held Seminar and Workshop in QC and Laboratory Management, The topic for this occasion is Method Validation and Six Sigma Implementation. The speakers are Dr. Sten Westgard from USA, Dr. Tjan Sian Hwa SpPK and Dr. Thyrza L. Darmadi, SpPK. We held the seminar cooperated with Abbott Diagnostics in Cordella Hotel Jakarta, 7 December 2017.



All participants gathered with Dr. Sten Westgard after Seminar & Workshop.

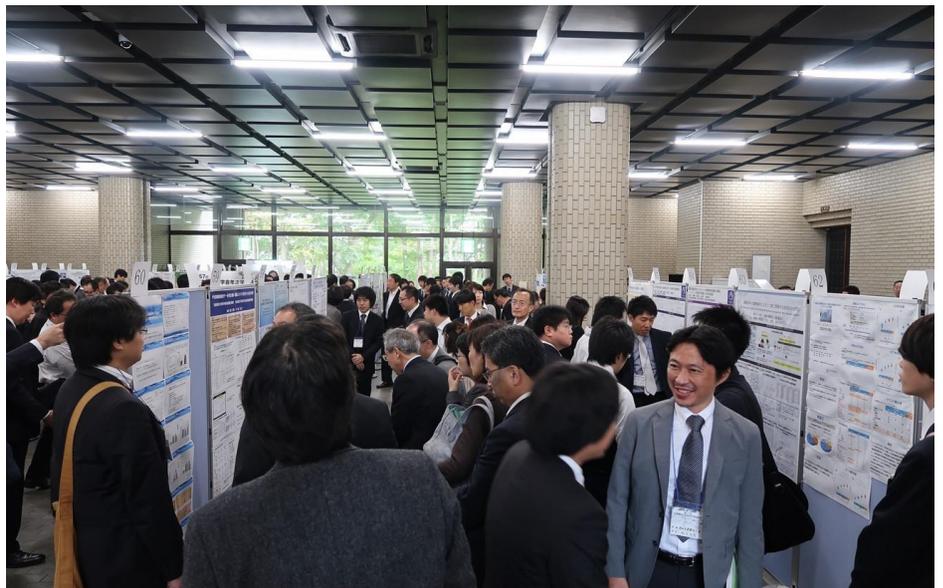


Japan Society of Clinical Chemistry (JSCC)

The 57th Annual Meeting of the Japan Society of Clinical Chemistry

During October 6–8, 2017, the 57th Annual Meeting of the Japan Society of Clinical Chemistry (JSCC), chaired by Prof. Chiba (Hokkaido University), was held in Sapporo, the northernmost capital city of Japan with a population of 2 million people. More than 700 participants gathered to Hokkaido University, and enjoyed academic programs as well as beautiful autumn leaves in the campus and Hokkaido's gorgeous foods in the banquet. The events in the meeting included the chairperson's address, 2 keynote lectures, 9 educational lectures, 13 symposiums/workshops, 12 luncheon seminars, 3 evening seminars, and 163 poster presentations. As the guest for the 1st JSCC International Scientific Seminar, Dr. Remaley (NIH, USA) was invited to the meeting and gave a lecture on recent progress in HDL research. One of the most notable of the meeting was that six joint symposiums were held, namely, with the Japanese Society of Toxicology, the Japan Mibyou System Association, the Japanese Society for Biomedical Mass Spectrometry, the Japanese Electrophoresis Society, the Japanese Society of Laboratory Medicine (Hokkaido Branch), and the Japanese Association of Medical Technology Education (Division of Clinical Chemistry). Thus, the JSCC is actively developing a collaborative relationship with adjacent academic societies. The snap shots of the meeting are attached.







Korean Society of Clinical Chemistry (KSCC) Annual Report of 2017

1. NATIONAL MEETINGS

Name Date Topic

1. Annual Meeting of KSCC (I) May-19, 2017

Symposium 1. Laboratory Accreditation for Clinical Chemistry Tests

Symposium 2. Understanding and Utilization of the Laboratory Statistics

Symposium 3. Introduction of KSCC Homepage

Symposium 4. Why re-establishment of Reference Interval for
Pediatric patients is necessary?

Symposium 5. Topic Review

Establishment of cardiac troponin assays

Update of eGFR formula for the diagnosis of Korean CKD patients

Symposium 6. Comprehensive Interpretation of Thyroid Hormone Tests

Workshop 1. Clinical Application of Mass Spectrometry

2. Annual Meeting of KSCC (II) November-30, 2017

Symposium 1. Quality Management required for Outstanding Laboratory
Accreditation

Symposium 2. Recently Introduced Biomarkers

Symposium 3. Clinical Significance and Utilization of Adrenocortical
Hormone Test

Symposium 4. Recent Trends of Urine Sediment Test

Workshop 1. Clinical Utilization of Mass Spectrometry

Workshop 2. Pharmacokinetic Report of Therapeutic Drug Monitoring (TDM)

3. EDUCATION

1. Laboratory Accreditation in Clinical Chemistry
2. Laboratory Statistics
3. Reference Interval in pediatric patients
4. Thyroid Hormone Test
5. Biomarker
6. Adrenocortical Hormone Test
7. Urine Sediment Test
8. Mass Spectrometry
9. Therapeutic Drug Monitoring (TDM)

4. REGIONAL RELATIONS

One council member for international affairs have correspondence activity for the Regional Relations (Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine, APFCB) in KSCC.

We will send the 2017 annual report to APFCB on Feb 28, 2018.

5. REGIONAL RELATIONS

One council member for international affairs have correspondence activity for the Regional Relations (Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine, APFCB) in KSCC. We will send the 2017 annual report to APFCB on Feb 28, 2018.



6. INTERNATIONAL RELATIONS

1. KSCC was delegated of logistics of authority from EuromedLab 2017 to facilitate participation in the EuromedLab 2017
2. KSCC fostered the KSCC members to attend EuromedLab 2017 congress in Athens
3. KSCC was delegated of logistics of authority from IFCC WorldLab Durban 2017 to facilitate participation in the IFCC WorldLab Durban 2017
4. KSCC (20 KSCC members) attended IFCC WorldLab Durban 2017
5. and introduced the IFCC WorldLab SEOUL 2020
6. President Jeong-Ho Kim participated in the IFCC 2017 Council Meeting
7. IFCC Network Laboratory for HbA1c in Korea
8. President Jeong-Ho Kim participated in JCTLM members' and stakeholders' meeting in Paris on December 4th to 5th, 2017.
9. KSCC submitted the biennial activity report to JCTLM

7. ADDITIONAL INFORMATION: The Officer Bearer of KSCC (2018)

1. President : Prof. Jeong-Ho Kim (Yonsei University College of Medicine)
2. Secretary General : Prof. Sang-Hoon Song (Seoul National University College of Medicine)
3. Treasurer : Dr. Hwan Sub Lim (Seoul Clinical Laboratories)
4. International Committee : Dr. Sung Eun Cho (Lab Genomics Clinical Laboratories)

Secretary: Ms. Anna Choi

Office Address: A1105-Asterium Seoul, 372 Hangang -daero, Yongsan-gu, Seoul, 04323, Republic of Korea

Email: ksc@ksc.or.kr



Familial Hypercholesterolemia (FH): An Indian Scenario

L. L. Reddy 1, T. F. Ashavaid^{1,2}

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Background:

Familial Hypercholesterolemia (FH) is a common genetic cause of premature Coronary Heart Disease (CHD). It is an autosomal, dominant and inherited disorder of lipoprotein metabolism that results in an elevated Low Density Lipoprotein-Cholesterol (LDL-C). FH exists in two clinical forms viz. Heterozygous FH (HeFH) and Homozygous FH (HoFH). Heterozygous (He) FH is the most common and less severe which affects 1 in 200–250 (Sjouke B et al., 2015) where LDL-C levels are approximately twice as those of the normal population ranging from 190–400 mg/dL (4.9–10.3 mmol/L). Homozygous (Ho) FH is rare and life threatening, clinically characterized by high LDL-C levels >500mg/dL (>13mmol/dL), with a prevalence of 1 in 1×10⁶.

Currently there are no true estimates of patients diagnosed with FH in India (Rangarajan et al., 2016). Individuals coming-in to hospitals for general health checkups are referred to Consultant physicians in medicine/cardiology/endocrinology and patients having any cardiac ailment are consulted by Cardiologist. In either case, if their lipid profile is elevated or abnormal, these patients are preferably managed by high intensity statins and they are rarely referred or treated as FH cases. There have been many international initiatives such as Amgen, The Familial Hypercholesterolemia Foundation And Stanford Medicine Launch FIND FH™ Initiative, The FH Foundation, European Atherosclerosis Society – Familial Hypercholesterolemia Studies Collaboration (EAS-FHSC), ScreePro-FH studies etc to increase awareness and early screening but the move has not been so encouraging except for a few countries.

FH and CHD:

FH is a significant risk factor for CHD, the leading cause of death globally. Premature mortality in terms of years of life lost because of heart Diseases in India increased by 59%, from 23.2 million till 1990 to 37 million till 2010 (Prabhakaran et al., 2016). Due to this escalation, India may bear a heavy burden of this genetic disorder, as one of the over populated country in the world. In recent years, the number of clinical and genetic studies to diagnose Hypercholesterolemia has increased worldwide but still not clearly defined in India.

FH Unawareness:

In many countries, including India, FH remains under diagnosed. One possible reason being lack of awareness amongst physicians and general public. A questionnaire study by Ashavaid et al., 2018, surveyed 79 General Physicians (GPs) out of which, 80% were unaware if they treated FH patients and 50% did not know about its prevalence nor were familiar with FH disorder.



In a similar study in Tamil nadu (Rangarajan et al., 2016), a total of 133 physicians were surveyed, only 27.9% perceived themselves to have above average familiarity with FH and 41.4% of physicians were unaware and unsure whether they had FH patients under their care. Hence, attention should be drawn towards establishing lipid clinic network within India which will aid in improving care and clinical practices.

Genetics:

Dominantly inherited FH disorder is present from birth that causes marked elevation in plasma cholesterol and premature CHD (Watts et al, 2011). The precise mode of inheritance was difficult to establish in regions where non-inherited hypercholesterolemia was common, and was first defined by Khachadurian in 1964 in Lebanese FH pedigrees. He showed that individuals from affected families by loss of function mutation in Low Density Lipoprotein Receptor (LDLR) could be segregated into three clear groups on the basis of their plasma cholesterol concentrations: (1) presumed homozygotes with levels four times higher than normal; (2) heterozygotes with levels two times higher than normal; (3) and unaffected individuals. He concluded that FH was inherited as a monogenic autosomal codominant trait—a dominant disorder with a gene-dosage effect. This opened the door to further translational and molecular research which led to discovery of Apolipoprotein B (ApoB) and Proprotein convertase subtilisin/kexin type 9 (PCSK9).

Majority of FH cases are caused by mutations in the LDLR which account for 79% FH cases, Apo B and PCSK9 account for 5% & <1% respectively (Weigman A et al, 2015). This loss of function mutations results in defective synthesis, assembly, transport, recycling or vesicle formation in LDL-Receptor pathway.

HeFH patients may inherit one mutant LDLR allele or PCSK9 allele or ApoB allele and if left untreated the total cholesterol levels increase upto 310 – 580 mg/dL (8 – 15 mmol/L) and eventually developing CHD before age 55 and 60. While in homozygotes with total cholesterol levels of 460 – 1160 mg/dL (12 – 30 mmol/L) patients typically develop CHD very early in life and if untreated die before age 20. Hence, To identify FH patients at the earliest is both economically and socially beneficial with implications for mortality and morbidity.

Once diagnosed, HeFH can immediately be treated with cholesterol-lowering medication such as statins to attenuate development of atherosclerosis and to prevent CHD (Nordestgaard et al.,2013). Also, with the arrival of the era of unprecedented cardiovascular protection, introducing exciting new therapies like PCSK9 inhibition or Lipoprotein Apheresis hold a pivotal promise as the future of lipid management. However, these therapies are yet to be introduced in India.

FH Genetic Studies in India:

As recommended by European Atherosclerosis Society (EAS), determination of mutations is important as they enable confirmation of diagnosis at an early age, which is followed by aggressive therapy reducing the mortality and morbidity (Cuchel et al., 2014).

In India, Ashavaid et al., 2000, reported mutations on Exon 3, 4, 9 and 14 on LDLR gene in 25 FH Indian patients. Of these, four were known mutations and two novel insertion mutations (Bombay FH1 and FH2 mutations).



After almost a decade, few more genetic studies have been performed in India by Gai et al.,2011, Aruljothi et al.,2016 and Setia et al.,2016 have reported novel mutations in LDLR and PCSK9 genes. This demonstrates heterogeneity of mutations in LDLR gene and other genes involved in this disorder, among the Indian population (Table 1). Also, this scarcity observed in molecular data warrants the need for genetic studies.

Table 1: List of genes

REFERENCES	SAMPLE SIZE	GENES SCREENED	METHOD	LDLR	ApoB	PCSK9
ASHAVAID ET AL., 2000, MUMBAI	25 Hypercholesterolemic patients	LDLR Apo B (exon 26)	SSCP and Hetroduplex	EXON 3 W66G, EXON 4E207K EXON 9E387K EXON 14P664L EXON 3 ins397G EXON 4 ins242G	No mutation Found	-
KULLARNI ET AL., 2011, ANDHRA PRADESH	24 patients and 10 normal controls	LDLR	Sanger	3 novel mutations; Exon 3- g.18298A>C, Exon 10-g.29209A>G g.29372_29373insC in Exon 10 was present in all 24 patients	No mutation Found	No mutation Found
ARULJYOTHI ET AL., 2016, TAMILNADU	30 out of 300 CAD patients UK-Simon	LDLR gene, exons and exon-intron boundaries of	HRM	EXON 4 c.694+8_694+18del EXON 7 c.966 C>T EXON 10	No mutation ion Found	No mutation ion Found



	Broom e	- APOB (only		c.1399_1340delinsTA [p.		
	criteri a	exon 26)		(T467Y)]		
		- PCSK9 (only		EXON 6		
		exon 7)		c.862G>A [p. (E288K)]		
				EXON 12		
				c.1845+2T>C		
SETIA ET AL.,	16 Homo	- entire LDLR	Sanger	EXON 4	No	EXON
2016	FH from 11	gene	Seque nci	c.530 C > T, c. 590 G > A	mutat	7
DELHI	familie s	- ApoB - two	ng and	EXON 8	ion	V359
		exons 26 &	MLPA	c.1070_1070delA	Found	M
		29		EXON 10		
		- PCSK9 -		c.1418T		EXO N
		one		EXON 15		9
		mutation		c.2286_2286 delG		c.14 86
		p.D374Y.		EXON 16		c>T
				c. 2370_2389 bp 20 del		
				c.2389G > A		
				EXON 17		
				c.2416_2417insG		
				c.2547 bp 5 G > A		
				1 pat. - Exon 12 deleted		

Future Perspective:

FH is usually an asymptomatic disease with main indicator of high LDL levels & family history of early heart diseases. There are very few publications in Indian FH patients using genetic analysis and a small number of novel variants are identified. In future, it would be worthwhile to analyze the mutation spectrum of patients with hypercholesterolemia and determine the prevalence in our population, which can then be used to effectively manage FH patients.

For diagnosis of FH, genetic testing is the preferred and effective method. Also, as FH is genetically determined, families must become focus of attention (Setia et al, 2011).



Cascade screening can identify more individuals with FH who will benefit from early treatment, result in near-normal life expectancy. Knowledge of mutations predominantly in LDLR gene, Apo B and recently discovered PCSK9 gene would facilitate cascade screening in siblings, parents and other relatives to identify early risk of CHD. Identifying disease-causing variants in these genes can be identified using Next Generation sequencing (NGS) approach such as Whole Genome or, Whole Exome Sequencing. Moreover, this type of elucidation to identify a set of mutations in Indian FH population is necessary for designing genetic diagnostic platform.

Conclusion:

Special efforts are required to identify individuals with FH in India as they are at high risk of premature CHD. Also, genetic testing in clinics and in hospitals coupled with family cascade screening could be the route to detect and diagnose FH cases. FH is a serious yet manageable disorder, thus it is essential to emphasize on spreading awareness & knowledge about FH in India.

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Biotin Interference- Seimens Healthineers

The facts about Biotin Interference

Date: 14 March 2018

In Nov 2017, US FDA issues a Safety Communication warning that high dose of biotin B in patient samples can cause falsely high or falsely low results, depending on the type of test. Incorrect test results may lead to inappropriate patient management or misdiagnosis.

Many dietary supplements promoted for hair, skin, and nail benefits contain biotin levels up to 650 times the recommended daily intake of biotin. Physicians may also be recommending high levels of biotin for patients with certain conditions such as multiple sclerosis (MS). Biotin levels higher than the recommended daily allowance may cause interference with lab tests.

This article provides background on biotin interference, generates awareness about this issue and tries to answer important questions from the perspective of clinical laboratories and clinicians.



What is biotin?

Biotin is a water-soluble B-vitamin (B7) that is integral to energy and metabolism (gluconeogenesis, fatty acid synthesis, and carbohydrate utilization). (1)

Why has biotin intake increased?

Biotin has gained increasing popularity as an over-the-counter supplement and is commonly included in multivitamins and beauty products marketed for hair and nails. Many of these hair-and-nail vitamins include biotin at concentrations up to 100 times the dietary reference intake (e.g., 3000 µg); some report as much as 10,000 µg. In addition, clinicians may prescribe biotin supplementation to help prevent biotin deficiency in pregnancy or to reduce leg cramps in dialysis patients. Clinicians may also prescribe high doses of biotin for multiple sclerosis, inborn metabolic disorders, and mitochondrial energy disorders.(2-6, 7-8, 9, 10-15)



In what foods is biotin found?**Meats & Poultry**

- Beef Liver
- Hamburger
- Pork Chop
- Egg

Fruits and Vegetable

- Sweet Potato
- Spinach
- Broccoli
- Banana & Apple

Fish

- Salmon
- Tuna

Nuts and Grains

- Sunflower Seeds
- Almond-Oatmeal

Dairy

- Milk (2%)
- Yogurt (Plain)

Bread (Whole Wheat)**What is the Dietary Reference Intake for biotin?**

The Dietary Reference Intake (DRI), or adequate intake in the case of biotin, is age-dependent. In adults, the adequate intake is 30–70 µg/day. This corresponds to an adult reference range of approximately 0.12–0.54 ng/mL, depending on the population from which the reference interval was derived. (1, 16–18, 19)

What is the potential risk of biotin interference with clinical laboratory tests?

- Multiple manufacturers use a streptavidin-biotin complex in many of their immunoassays. Advantages of this complex include its high binding affinity, adaptability for binding antigen or antibody, and ability to readily attach to a solid phase (such as a microbead).
- Supra-physiological doses of biotin ingested for either cosmetic or pharmacologic use can result in serum concentrations as high as 1160 ng/mL (µg/L) 1 hour after a single oral biotin dose of 300 mg. (20)
- Biotin interference can cause either falsely depressed or falsely elevated patient test results.

**Ask your patients:**

- Are you currently taking a multivitamin that includes biotin?
- Are you currently taking a hair, skin, and nail supplement?
- Are you currently taking biotin as part of a therapeutic regimen?



How long does it take after biotin use is discontinued for a patient's biotin to reach a level that does not impact results?

The time after last use required for a patient's biotin to reach a level that does not impact results depends on a variety of factors including, dose and duration of use, clinical conditions, age & the half-life of biotin in the serum.

- For a single oral biotin dose of approximately 600 µg, which is greater than DRI, the half-life has been reported as less than 2 hours. (21)
- More recently, the half-life for single oral biotin doses between 100–300 mg (100,000–300,000 µg) has been shown to vary between 8–19 hours. (12–13)
- For individuals ingesting mega-doses of biotin, up to 300 mg/day, serum concentrations as high as 1160 ng/mL have been observed which means that it would take > 24 to 36 hours for the biotin levels to not impact test results. (14)

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Snow-Covered Bamboos with Sparrows

By Dr It-Koon Tan (APFCB Founding & Past President)

Bamboos are evergreen perennial plants. Many species are found in diverse climates, ranging from hot tropical regions to cool mountainous regions and highland cloud forests. They are indigenous in the Asia-Pacific region: China, India, Japan, Korea, South-East Asian countries and parts of Australia. Bamboos are of notable economic and cultural significance in South Asia, Southeast Asia and East Asia.

In Chinese culture, bamboo is a highly popular and desirable plant as: (1) every part of the bamboos are useable (food, clothing, building material and household utensils, transportation, ancient books and music instruments, and other uses), and (2) the ideal moral significance it implies. It is admired for its perseverance under harsh conditions. Its deep root denotes resoluteness. Its tall, straight, and hollow but stiff and unbending stem represents an upright and unyielding nature, honorability and humility, which are characteristics desired of a gentleman and scholar in Chinese culture. Besides being a symbol of virtue, bamboo was believed to be endowed with soul and emotion. As a plant it is also beautiful to look at and serves well as a valuable living object of décor to add beauty and character to many different environments. Therefore, apart from those which grow in the wild in large forests, bamboos are often planted in public places, gardens and home courtyards in China and other countries in Asia.

It is little wonder that ancient Chinese literati held bamboo in profound esteem. This explains why there are so many writings and paintings dedicated to it throughout history. Some of the most well-known scholars in Chinese history and painters devoted their entire life to the art of painting bamboos. There is a famous Chinese poem which expresses the importance of bamboos:

“I would rather live without meat, but not without bamboo. Absence of meat in meals makes one slender, but absence of bamboo in the living environment makes one unrefined or vulgar.”

This was written by Chinese Song Dynasty scholar, Su Shi (1037–1101), who showed his talent not only in his poems but also in paintings of bamboo. He believed that the consummate portrait of bamboo is one derived from close observation of the plant and comprehension of the ethos it incarnates.

Sparrows are small, plump, birds with brown and grey feathers, short tails and stubby, powerful beaks. They are one of the most common and abundant birds in Asia, South-East Asia and even Europe. They are very social species and *live* in large extended family *groups*. They are highly adaptable and survive on all kinds of food depending on season, environment, and availability: from insects, worms, cereal grains, seeds and fruits, to food scraps left over by man. Sparrows are the most productive and human-friendly bird commonly found in both rural and urban areas. They thrive in areas occupied by human beings, setting up nests and looking for food in human-occupied environments. Thus, they have been given the nickname “mice which can fly”.



In Chinese culture, the sparrow represents the characteristics of tenacity, strength in spirit not easily struck down by adversity, and liveliness with a strong sense of vigilance or alertness.

Sparrows are often featured in Chinese paintings. They provide a sense of liveliness to the art works as well as a contrast between movement and stillness.

This painting is inspired by the high ideals of the humble bamboo and common sparrow. In spite of the snow and harsh weather, the bamboos remain green (unchanged), upright and unyielding and the sparrows remain lively, alert and cheerful.

