

Plenary Session I Beyond 3 Highs

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 23 日 14:00~16:20

| Time | Topic | Speaker | Moderator |
|-------------|--|---------------------------------|-----------|
| 14:00-14:10 | Opening Remarks | | 徐國基 理事 |
| 14:10-14:30 | The Relation between Hyperuricemia and Cardiovascular Disease or Chronic Kidney Disease: Epidemiological Overview | 馬偕醫院 心臟內科 洪崇烈 醫師 | |
| 14:30-14:40 | Discussion | | 翁文章 常務理事 |
| 14:40-15:00 | Is It Time to Target Uric Acid to Prevent Cardiovascular Disease or Chronic Kidney Disease? | 三軍總醫院 腎臟科 吳家兆 主任 | |
| 15:00-15:10 | Discussion | | 陳肇文 名譽理事 |
| 15:10-15:30 | The Role of Uric Acid in Pathogenesis of Atherosclerosis and the Review of Current Clinical Guidelines of Uric Acid Management | 台中榮總 過敏免疫風濕科 謝祖怡 醫師 | |
| 15:30-15:40 | Discussion | | 王國陽 監事 |
| 15:40-16:00 | How to Control Patients Serum Uric Acid Safely: The Risk and Prevention of Allopurinol Hypersensitivity | 林口長庚 藥物過敏中心 & 皮膚科系 鐘文宏 主任 | |
| 16:00-16:10 | Discussion | | |
| 16:10-16:20 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE

姓名：洪崇烈

學歷：

台大醫學院學士畢

台大公共衛生碩士畢

經歷：

| | |
|--------------------|------------------|
| 1999-2002 | 馬偕醫院內科住院醫師 |
| 2002-2004 | 馬偕醫院心臟內科總醫師 |
| 2004-至今 | 馬偕醫院心臟內科主治醫師 |
| 2004年/11月-2005年/3月 | 林口長庚紀念醫院心臟科電生理訓練 |
| 2004-至今 | 馬偕紀念醫院心臟科臨床電生理醫師 |

現任：

財團法人馬偕紀念醫院資深主治醫師

馬偕醫學院，護理與管理學院講師

PGY-1臨床講師

中華民國內科醫學委員會：

| | |
|-------|------------------------------|
| 2001年 | 台灣內科醫學會會員 |
| 2002年 | 台灣心臟學會TSOC會員 |
| 2004年 | 台北國際會議中心會員 |
| 2005年 | TSOGECM會員 |
| 2006年 | 美國心臟超音波學會會員 |
| 2007年 | 美國心臟學會會員 |
| 2007年 | 台灣老年學學會會員 |
| 2011年 | 台灣心臟學會專科指導老師 |
| 2011年 | 姜必寧青年優秀心臟論文獎 |
| 2011年 | 中華民國醫用超音波學會一百年度優秀論文獎第一名 |
| 2011年 | 中華民國醫用超音波學會一百年度心臟科優秀口頭論文獎第一名 |



The Relation between Hyperuricemia and Cardiovascular Disease or Chronic Kidney Disease: Epidemiological Overview

洪崇烈

CURRICULUM VITAE

姓名：吳家兆

單位：腎臟內科

學經歷：

國防醫學院醫學系畢業

國防醫學院醫學研究所博士

中華民國內科專科醫師

中華民國腎臟科專科醫師

國防醫學院內科學科專任副教授 (副字第 044518 號)

現職：

三軍總醫院腎臟科主治醫師

三軍總醫院血液透析室主任

三軍總醫院腎臟科主任



Is It Time to Target Uric Acid to Prevent Cardiovascular Disease or Chronic Kidney Disease?

Chia-Chao Wu

Division of Nephrology, Department of Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

吳家兆 醫師

三軍總醫院 腎臟內科

Uric acid is a product of purine metabolism and hyperuricemia has been linked to gout and kidney calculi. In observational studies, hyperuricemia has been linked with an increased risk of hypertension (HTN) and chronic kidney disease (CKD). Emerging evidence suggests a pathogenic role of hyperuricemia in the development of HTN and CKD by inducing inflammation, endothelial dysfunction, and activation of the renin-angiotensin system. A few clinical trials have assessed the use of uric acid-lowering therapies in the prevention of CKD progression and cardiovascular disease (CVD). However, most of these trials are short-term with a small sample size. Is it time to target sUA to retard CKD or CVD progression? According to current evidence, it is still premature to recommend targeting sUA for practical therapeutic or preventive use to retard CKD or CVD progression. Larger randomized controlled trials are needed for further confirmation.

CURRICULUM VITAE

姓名：謝祖怡 (Hsieh, Tsu-Yi)

學歷：

私立中國醫藥學院醫學系醫學士，
國立中興大學醫學科技研究所碩士
私立逢甲大學博士學程醫療經濟組博士生

經歷：

1995-2002 台中榮民總醫院內科部住院醫師，總住院醫師
2002-present 台中榮民總醫院內科部過敏免疫風濕科主治醫師
2003-present 台中榮民總醫院實證醫學中心執行組組長
2005. 8-2014. 2 台中榮民總醫院臨床技術訓練中心主任
2014. 3-present 台中榮民總醫院教學部臨床訓練科主任

教職：

大葉大學校聘助理教授，國防醫學大學臨床助理教授
部定講師 (2008.Jul) 中山醫學大學講師

專業組織經歷：

臺灣風濕病學會第十二屆監事，第十三屆、第十四屆理事
臺灣醫學臨床技能測驗委員會委員
臺灣肺高壓協會第一屆監事
臺中榮民總醫院實習醫學生醫學臨床技能測驗考場主任
臺灣風濕病學會血管炎 / 風濕病肺高壓協作組召集人

BOARD CERTIFICATIONS:

中華民國內科專科醫師
中華民國風濕病專科醫師
中華民國免疫專科醫師

獲獎：

2009 獲選商業週刊百大良醫
2014 獲獎醫策會醫療心職人

編輯委員：

中華民國高尿酸血症及痛風治療指引編輯委員 (第一、二版及 2016 第三版)
亞太抗風濕聯盟 (APLAR) 類風濕關節炎治療指引編輯委員 (2013-2017)
臺灣免疫疾病相關肺高壓篩檢建議流程編輯委員 (2015)
臺灣抗白血球細胞質抗體 (ANCA) 血管炎診療指引編輯委員 (2016)



The Role of Uric Acid in Pathogenesis of Atherosclerosis and the Review of Current Clinical Guidelines of Uric Acid Management

Tsu-Yi Hsieh^{1,2}, and Der-Yuan Chen¹

¹*Division of Allergy, Immunology and Rheumatology, Department of Internal Medicine*

²*Division of Clinical Skill Training, and Center of Evidence-based Medicine, Department of Medical Education
Taichung Veterans General Hospital, Taiwan*

A Metabolic syndrome, which consists of multiple interrelated conditions, increases the risk for atherosclerotic cardiovascular disease up to 3 times and increases the risk for type 2 diabetes up to 5 times. Uric acid, once viewed as an inert metabolic end-product of purine metabolism, has been recently incriminated in a number of chronic disease states, including hypertension, metabolic syndrome, diabetes, non-alcoholic fatty liver disease, and chronic kidney disease.

The potential link between gout, a common inflammatory arthritis, and metabolic syndrome has been repeatedly suggested, but no quantitative population data are available; therefore, the magnitude of the problem remains unclear. The proposed connection has been supported by the close association between hyperuricemia and insulin resistance syndrome

Here we discuss some of the major mechanisms linking uric acid to metabolic and cardiovascular diseases and showed evidence of therapeutic benefit in uric acid lowering therapy in diabetes patients.

These findings indicate that the prevalence of metabolic syndrome is remarkably high among individuals with gout. Given the serious complications associated with metabolic syndrome, this frequent comorbidity should be recognized and taken into account in long-term treatment and overall health of individuals with gout. Elevated uric acid may turn out to be one of the more important remediable risk factors for metabolic and cardiovascular diseases.

CURRICULUM VITAE

姓名：鐘文宏

E-mail：chung1@cgmh.org.tw ; wenhungchung@yahoo.com



EDUCATION:

1990-1997 中山醫學院醫學系
2003-2008 陽明大學生命科學院生化暨分子生物研究所博士
(中央研究院Taiwan International Graduate Program in Molecular Medicine)

POSITIONS:

1999-2003 長庚醫院皮膚科住院醫師
2003-至今 長庚醫院皮膚科主治醫師
2009-至今 長庚醫院醫師研究員
2014-至今 長庚大學醫學系專任副教授
2015-至今 長庚醫院學術組教授
2012-至今 長庚醫院北院區藥物過敏中心主任
2013-至今 長庚體系免疫研究團隊負責人
2015-至今 台北林口長庚醫院皮膚科系主任

HONORS:

2004-6 中研院生物醫學研究所研究獎助醫師
2005 李鎮源教授醫學研究青年學者獎
2006 第一屆永信李天德醫藥科技傑出論文獎
2006 2006年台灣十大潛力人物(中央社)
2006 九十五年青年獎章得獎人
2006 台灣皮膚科學發展文教基金會論文獎
2009 長庚醫院王董事長金牌獎章
2009 第七屆有庠科技論文獎
2009 國科會吳大猷先生紀念獎
2009 台灣第47屆十大傑出青年
2011 永信李天德醫藥基金會青年科學家學術研究獎
2011 世界皮膚科醫學會年輕醫師成就獎(The International League of Dermatological Societies (ILDS) Young Dermatologist International Achievement Award
2015 科技部103年度傑出研究獎

PROFESSIONAL AFFILIATIONS:

Jul. 1999-present Membership of The Chinese Dermatological Society, Taipei
2004-present Membership of American Dermatological Society
2003-present Membership of the American Society of Human Genetics
2003-2011 Committee of National Clinical Core for Genomic Medicine, Academia Sinica, Taiwan
2008-present Membership of European RegiSCAR consortium
2009-2016 國科會專題計畫複審委員
2012-present 行政院衛生署「藥害救濟審議委員會」委員



How to Control Patients Serum Uric Acid Safely: The Risk and Prevention of Allopurinol Hypersensitivity

鐘文宏

 **MEMO**

A series of horizontal dotted lines for writing a memo.

Plenary Session II

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 23 日 16:30~17:30

| Time | Topic | Speaker | Moderator |
|-------------|---|----------|-----------|
| 16:30-17:00 | There is Something More Than LDL-C to Treat for High-risk Population and the Role of Prescription Omega-3 | 吳造中 名譽理事 | 殷偉賢 名譽理事 |
| 17:00-17:20 | Evolution and Clinical Impact of Ezetimibe Based Lipid Lowering Therapy for High Risk Patients | 林宗憲 教授 | 常敏之 常務理事 |
| 17:20-17:30 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE



NAME: Chau-Chung Wu, M.D., Ph.D.

EDUCATION:

- 1978-1985 M.D., College of Medicine, National Taiwan University, Taipei, Taiwan
 1991-1995 Ph.D. (Clinical Medicine), College of Medicine, National Taiwan University, Taipei, Taiwan
 1995-1996 Visiting Research Associate in Biomedical Engineering, Johns Hopkins University, Baltimore, USA

PROFESSIONAL SPECIALTY:

Cardiology, Vascular and cellular biology, Dyslipidemia, Cardiovascular image, Biomagnetism, Nanotechnology

HOSPITAL APPOINTMENTS:

- 1984-1985 Intern (Medicine), National Taiwan University Hospital, Taipei, Taiwan
 1987-1992 Resident (Internal Medicine), National Taiwan University Hospital, Taipei, Taiwan
 1990-1992 Research Fellow in Cardiology, National Taiwan University Hospital, Taipei, Taiwan
 1992-1994, 2-1995, 2 Staff Cardiologist, National Taiwan University Hospital, Taipei, Taiwan
 1994, 2-1995, 2 Director, Coronary Care Unit, National Taiwan University Hospital, Taipei, Taiwan
 1997, 8-2001, 7 Director, Echocardiographic Lab. National Taiwan University Hospital, Taipei, Taiwan
 2001, 8-2003, 7 Director, Cardiovascular Functional Lab. National Taiwan University Hospital-Kong-Kuan, Taipei, Taiwan
 2002, 8-2005, 6 Vice-Chairman, Department of General Medicine, National Taiwan University Hospital-Kong-Kuan, Taipei, Taiwan
 2005, 7-2007, 6 Chairman, Department of Internal Medicine, E-Da Hospital/I-Shou University, Kaohsiung, Taiwan
 2007, 9-2009, 8 Director, Intensive Care Unit, National Taiwan University Hospital-Kong-Kuan, Taipei, Taiwan

ACADEMIC APPOINTMENTS:

- 1990-1992 Research Fellow in Cardiology, National Taiwan University Hospital, Taipei, Taiwan
 1993-1997 Lecturer in Medicine, National Taiwan University, Taipei, Taiwan
 1995-1996 Visiting Research Associate in Biomedical Engineering, Johns Hopkins University
 1998-2003 Assistant Professor in Primary Care Medicine and Internal Medicine, National Taiwan University, Taipei, Taiwan
 2003-2009 Associate Professor in Primary Care Medicine and Internal Medicine, National Taiwan University, Taipei, Taiwan
 2009-2014 Professor in Primary Care Medicine and Internal Medicine, National Taiwan University, Taipei, Taiwan
 2014- Professor in Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan
 Professor in Department of Medical Education & Bioethics, and Department of Graduate Institute of Medical Education & Bioethics, National Taiwan University College of Medicine



There is Something More Than LDL-C to Treat for High-risk Population and the Role of Prescription Omega-3

Chau-Chung Wu, M.D., Ph.D.

Hypertriglyceridaemia (HTG) is an independent risk factor for cardiovascular disease; high-risk patients with HTG, such as those with metabolic syndrome or diabetes, may benefit from hypolipidaemic therapies. Several lipid-lowering drugs act by reducing triglyceride (TG) levels, including fibrates, nicotinic acid and omega-3 fatty acids. The omega-3 polyunsaturated fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) dose-dependently reduce plasma TG levels; the effect tends to be greater in patients with higher TG levels at baseline. Evidence from clinical trials suggests that EPA+DHA doses of ≥ 2 g/day are required to achieve significant effects. The optimal TG-lowering doses of EPA+DHA are 3-4 g/day, with little evidence to support lipid-altering efficacy of doses of EPA and DHA <1 g/day. Predicted changes in fasting serum TG levels at the recommended dietary intakes of EPA and/or DHA of 200-500 mg/day are -3.1% to -7.2%. Reductions of plasma TG levels at the optimal doses are from 25-35% up to 45% in the presence of severely elevated TG levels (≥ 500 mg/dl; ≥ 5.65 mmol/l), along with a reduction in non-high-density lipoprotein-cholesterol (non-HDL-C) and an increase in HDL-C. This observation has also been confirmed in statin-treated patients.

CURRICULUM VITAE

NAME: Tsung-Hsien Lin, MD, MSc, PHD, FESC, CPI (林宗憲)

Division of Cardiology, Department of Internal Medicine; Kaohsiung Medical University Hospital and Department of Internal Medicine, Faculty of Medicine, College of Medicine, Kaohsiung Medical University

EDUCATION:

Sep 1989-Jun 1996 Department of Medicine, Kaohsiung Medical College, M.D. degree
 Sep 1999-Jun 2002 Graduate Institute of Clinical Medicine, Kaohsiung Medical University, Master of Science degree (MSc)
 Sep 2003-Jun 2007 Graduate Institute of Clinical Medicine, Kaohsiung Medical University, PHD degree

CURRENT POSITION:

Aug 2013-Present Professor, Department of Internal Medicine, Faculty of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan, R.O.C. (教字第021006號)
 Aug 2015- Director, cardiac critical unit, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.
 Aug 2001- Attending Physician, Division of Cardiology, Department of internal medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.
 Aug 2015- Director, Administration Center, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan, R.O.C.
 May 2014-Apr 2016 24th Executive (理事), Taiwan Society of Cardiology (TSOC)
 Feb 2014-Jan 2016 5th Supervisor (監事), Taiwan Society of Cardiovascular Interventions (TSCI)
 Dec 2014-Nov 2016 5th Executive (理事), Taiwan Hypertension Society (THS)
 Jan 2015- Deputy editor in chief, Acta Cardiologica Sinica (SCI)
 Aug 2012- 高雄醫學大學醫學系暨後醫學系課程委員會委員
 高雄醫學大學臨床技能發展委員會幹事
 高雄醫學大學醫學系行政教師
 高雄醫學大學附設醫院人體試驗審查委員會委員

PUBLICATION: 186 papers until 201500808

SCIENTIFIC MEETING: 53 papers until 201500808



Evolution and Clinical Impact of Ezetimibe Based Lipid Lowering Therapy for High Risk Patients

林宗憲

Statins have been the cornerstone of CV risk reduction for many years. However many patients do not tolerate especially high dose statin therapy due to muscular side effects. The recent IMProved Reduction of Outcomes: Vytorin Efficacy International Trial (IMPROVE-IT) demonstrated a significant clinical benefit of a non-statin lipid lowering medication (ezetimibe) in patients who have recently experienced an acute coronary syndrome. Ezetimibe addition led to a very low LDL-C level and positive results on the primary endpoint. This is the first major trial to demonstrate a significant benefit of a lipid lowering medication in addition to statins. This presentation will explore the challenges and benefits of aggressive LDL lowering in various clinical scenarios and it will include case examples of difficult to treat hyperlipidemia and present strategies on how to manage these patients effectively.

Dinner Symposium

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 23 日 17:30-18:30

| Time | Topic | Speaker | Moderator |
|-------------|---|------------------|-----------|
| 17:30-17:35 | Opening Remarks | | 葉宏一 理事長 |
| 17:35-18:15 | Not All Statins are the Same: Some Guidance on How to Manage High-risk Patients | Prof. Kausik Ray | |
| 18:15-18:25 | Panel Discussion | | 吳造中 名譽理事 |
| 18:25-18:30 | Closing Remarks | | |

CURRICULUM VITAE



NAME: Professor Kausik Kumar RAY

E-mail: koshray@gmail.com

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EDUCATION:

- 1990 Elective, Anaesthetics
1988 Intercalated BSc, University of Birmingham
1985-1991 Medical School, University of Birmingham

EMPLOYMENT HISTORY:

- Feb 2015 Professor of Public Health, Lead for the Imperial Centre for Cardiovascular Disease Prevention (ICCP), Department of Primary Care and Public Health, School of Public Health, Imperial College London
Honorary Consultant Cardiologist, Imperial College Healthcare NHS Trust
- Jun 2010 Professor of Cardiovascular Disease Prevention, Division of Cardiovascular Sciences, St George's, University of London
Honorary Consultant Cardiologist, St George's Hospital NHS Trust
- Jun 2006 British Heart Foundation Intermediate Fellow, Department of Public Health and Primary Care, University of Cambridge
Honorary Consultant Cardiologist, Addenbrookes Hospital
- Apr 2006 Locum Consultant Cardiologist, Walsall Manor Hospital
- Jan 2004 British Heart Foundation International, Fellow Brigham and Women's Hospital / Harvard Medical School, Boston, US
- Feb 2003 SpR Cardiology, Northern General Hospital, Sheffield
- Aug 2002 SpR Cardiology / GIM, Doncaster Royal Infirmary
- Apr 2002 SpR Cardiology, Northern General Hospital, Sheffield
- May 1999 BHF Junior Research Fellow/ Research Fellow, University of Sheffield
- Sept 1998 SpR Cardiology, City Hospital NHS Trust, Birmingham
- Aug 1995 SpR Cardiology/ General Medicine, Walsgrave Hospital NHS Trust, Coventry
- Aug 1992 SHO, City Hospital NHS Trust, Birmingham
- Feb 1992 House Officer, Good Hope Hospital, Birmingham
- Aug 1991 House Officer in General Medicine, Birmingham Heartland Hospital, Birmingham



Not All Statins are the Same: Some Guidance on How to Manage High-risk Patients

Prof. Kausik Kumar Ray, MD., MPhil.

*Imperial Centre for Cardiovascular Disease Prevention,
Department of Public Health and Primary Care,
School of Public Health, Imperial College London, UK*

The JUPITER trial suggested for the first time that statins increase the risk of diabetes whilst preventing cardiovascular disease events. At that time it was unknown whether this was a chance finding, an observation unique to Rosuvastatin, or a class effect. A meta-analysis comparing statins with placebo looked at over 93,000 patients showed that statins increased the risk of diabetes by 9%, with one additional case reported for every 1,000 person-years of treatment. At the same time, between five and seven cases of cardiovascular disease were prevented, thus the net benefit of statins favoured their use. A second meta-analysis of high- versus low- or moderate-intensity statins showed that the risk of diabetes was increased by a further 12% whilst at the same time preventing three cases of cardiovascular disease for every additional case of diabetes reported. The risk of diabetes with statins was not observed equally by all subjects and was more likely when subjects were older, had impaired fasting glucose and metabolic syndrome.

None of these meta-analyses previously included Pitavastatin, the newest of all the statins. Concerns about the risk of diabetes with other statins may limit the general use of these drugs amongst patients and physicians alike. J-PREDICT was the first prospective study using formal evaluation of glucose measurements to assess whether Pitavastatin increased the risk of diabetes. It demonstrated that diabetes was actually reduced by 18%. An independent meta-analysis of approximately 15 trials of Pitavastatin, reporting on more than 4,000 individuals, supported these observations. It demonstrated no significantly different effect of Pitavastatin on glucose, HbA1c, or risk of diabetes. There was no evidence of a dose effect or increase in risk with increased duration of therapy. These findings lead to the European Medicines Agency to give Pitavastatin a label for glucose neutrality.

Amongst patients who are at high-risk of cardiovascular disease and therefore require a statin, in whom factors such as metabolic syndrome, impaired glucose tolerance, and obesity are a concern, Pitavastatin may offer the safest option amongst the statins by both effectively lowering LDL cholesterol and glucose neutrality.

Plenary Session III

姜必寧獎得獎者演講

地點：財團法人張榮發基金會八樓 803

日期：106 年 9 月 23 日 14:00~14:55

| Time | Topic | Speaker | Moderator |
|-------------|---------------------------------|---------|-----------|
| 14:00-14:05 | Opening Remarks | | 殷偉賢 名譽理事 |
| 14:05-14:25 | 大數據分析揭示 oxLDL 對糖尿病的保護作用 | 崔慶華 教授 | |
| 14:25-14:45 | micro-RNA 調控血管病理性重構—從基礎到臨床 | 張力 教授 | 王國陽 監事 |
| 14:45-14:55 | Discussion & Closing | | |

CURRICULUM VITAE

姓名：崔慶華



北京大學醫學部教授，博士，2005年在中國科學院自動化研究所取得博士學位，北京大學分子心血管學教育部重點實驗室心血管生物資訊學研究室主任，北京大學基礎醫學院醫學資訊學系主任。研究方向為生物醫學大數據分析及其在心血管病中的應用，目前主要研究興趣是非編碼RNA和網絡藥理學，開發系列研究非編碼RNA和心血管疾病關係以及藥物研究的生物資訊學軟件。發表SCI論文50餘篇。其中第壹/責任作者發表SCI文論48篇（第壹作者7篇，責任作者41篇）。主持和參與國家自然基金委、973、863等課題8項，2014年獲得國家自然基金委“優秀青年基金”支持。

大數據分析揭示oxLDL對糖尿病的保護作用

崔慶華

現在是大數據時代，大數據已經對商業、金融、交通、工業和農業產生革命性的影響，對於生物醫學也開始產生重要影響，但是因為醫學的複雜性，大數據分析在醫學中的成功應用仍然少見。目前，大數據分析的核心是以關聯分析為主，並不關心分析物件中的因果性。在該演講中，講者將介紹其新發展的生物醫學大數據中的因果性分析方法，並利用該方法對氧化低密度脂蛋白進行了全面分析，揭示了其可能對糖尿病等疾病具有保護作用，並對這一結果進行了動物實驗，結果證實了大數據分析的預測，氧化低密度脂蛋白確實對糖尿病具有保護作用。

CURRICULUM VITAE



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學歷：

英國倫敦大學國王學院心血管系博士

現任：

浙江大學醫學院教授

博士生導師

浙江大學心血管病研究所副所長

醫學院附屬第一醫院心內科主任兼國際交流部主任

學習經歷：

1994.9-1999.6 浙江大學醫學院臨床醫學系，99年6月獲學士學位

1999.9-2002.6 浙江大學醫學院內科心血管病專業，02年6月獲碩士學位

2005.9-2008.12 英國倫敦大學國王學院心血管系，08年12月獲博士學位

2015.7-2015.9 美國斯坦福大學醫學中心心血管系 高級訪問學者

工作經歷：

2002.8-至今 浙江大學醫學院附屬第一醫院心內科，2004年9月晉升主治醫師，2009年12月晉升浙江大學醫學部副研究員，2013年12月晉升副主任醫師

2010.7-至今 獲浙江大學醫學部碩士生導師資格

2011.7-至今 獲浙江大學醫學部博士生導師資格

2014.04-至今 任浙江大學醫學院附屬第一醫院心內科主任

2015.12-至今 浙江大學醫學院教授

2016.07-至今 任浙江大學心血管病研究所副所長

2017.01-至今 任浙江大學醫學院附屬第一醫院國際交流部副主任（主持工作）



micro-RNA 調控血管病理性重構－從基礎到臨床

張 力



 **MEMO**

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Plenary Session IV

Big Data: What Information Does the Big Data Provide?

地點：財團法人張榮發基金會八樓 803

日期：106年9月23日 15:00~17:15

| Time | Topic | Speaker | Moderator |
|-------------|--|-------------------------|-----------|
| 15:00-15:05 | Opening Remarks | | 葉宏一 教授 |
| 15:05-15:45 | Big Data Research: Setup and Interpretation | Prof. Masafumi Kitakaze | |
| 15:45-15:50 | Discussion | | |
| 15:50-16:15 | How to do Big Data Research? AF as an Example | 台北榮民總醫院心臟科 趙子凡 醫師 | 杜裕康 教授 |
| 16:15-16:20 | Discussion | | |
| 16:20-16:30 | Coffee Break | | |
| 16:30-16:55 | Research Based on National Health Insurance Research Database: Advantage and Limitation | 成大醫院心臟科 李政翰 醫師 | 李貽恆 教授 |
| 16:55-17:00 | Discussion | | |
| 17:00-17:15 | Closing Remarks | | 陳肇文 教授 |

CURRICULUM VITAE

NAME: Masafumi Kitakaze

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EDUCATION:

1985 Osaka University, Ph.D., Medical Science

1981 Osaka University School of Medicine, M.D.

1977 Kyoto University Department of Technology, B.S. Mechanical and Physical Engineering

PROFESSIONAL SOCIETIES:

Japanese Circulation Society

Japanese College of Cardiology

Japanese Society of Internal Medicine

Japanese Society of Medical and Biomedical Engineering

Japanese Society of Clinical Physiology

Japanese Society for Circulation Research

The Japanese Heart Failure Society

The Japanese Society of Hypertension

The Japanese Coronary Association

Japanese Society of Anti-Aging Medicine

The Japanese Vascular Biology and Medicine Organization

International Society of Heart Research, Japan Section

American College of Cardiology

American Heart Association

European Society of Cardiology

THE FELLOWSHIP OF THE PROFESSIONAL SOCIETIES:

Apr 1991-present Fellow of the Japanese Circulation Society

Apr 2013-Mar 2014 Trustee of the Japanese Circulation Society

Apr 2014-present Supervisor of the Japanese Circulation Society

Sep 2001-present Fellow and Councilor of the Japanese College of Cardiology

Apr 2012-present Councilor of the Japanese Society of Internal Medicine, Kinki Section

Apr 2007-present Representative of the Japanese Society of Medical and Biomedical Engineering

Apr 2004-present Fellow of the Japanese Heart Failure Society

Apr 2010-present Trustee of the Japanese Heart Failure Society

Dec 2012-present Trustee of the Japanese Coronary Association

Jul 2011-present Councilor of Japanese Society of Anti-Aging Medicine

Dec 2012-present Councilor and Supervisor of the Japanese Vascular Biology and Medicine Organization

Aug 1997-present Fellow and Councilor of the American College of Cardiology

Nov 1997-present Fellow of the Council of Basic Cardiovascular Sciences in the American Heart Association (#116658701)

May 2003-present Fellow and Trustee of the International Society Heart Research, Japan Section

Sep 2013-present Fellow of the European Society of Cardiology



Big Data Research: Setup and Interpretation

Masafumi Kitakaze¹, Hiroki Fukuda¹, Mari Sakamoto¹, Yuri Nakajima¹,
Miki Imadu¹, Kazuhiro Shindo¹, Hiroko Takahama¹, Hai Ying Fu¹,
Shin Ito¹, Takashi Washio²

¹Department of Clinical Research and Development, National Cerebral and Cardiovascular Center, Suita, Osaka, Japan, ²The institute of Scientific and Industrial Research, Osaka University, Suita, Osaka, Japan,

Science in medicine has been classified as empirical and theoretical sciences for clinical practice; empirical science is derived from the experimental facts to construct the mathematical models, and theoretical science is derived from the mathematical model to fit it to the actual clinical data. We who are devoted in the basic and clinical medicine have worked in these two separate fields of the medical science. Upon the acquisition of the fruitful results of two fields of science, we have performed the novel drug discovery in the basic science and large scale clinical trials as the clinical medicine, which we have thought the royal road of medical science. However, the other sciences such as technology and physics are extending their empirical or theoretical science to the computational science and to the forth science of data-centric science, which are not followed by the medical sciences. This fact hints us that we are isolated as “galapagosization” from the other fields of the sciences. To return to the ordinary route of the science, we have decided to follow the royal road of medical science departing for the ordinary strategy of medical science. First of all, to start the computational medicine, we make a model for the prediction of cardiovascular events in the patients with chronic heart failure (CHF) and mathematically solved the equation $\tau=f(x_1, \dots, x_p)$, where τ represents the clinical outcomes and x_1, \dots, x_p represent clinical factors in 151 CHF patients. The mathematical analysis was performed through a probabilistic modeling of the relational data by assuming a Poisson process for re-hospitalization and by linear approximation of the relationship between the clinical factors and the mean elapsed time to cardiovascular events. We succeeded in formation of the model for clinical consequences in CHF. As for the data-centric medicine, the data-mining using LAMP method and the data for the CHF patients provided the novel unknown factors or the combination of the rules for the probability of early re-hospitalization. Here, we offer “precision medicine” for patients with heart failure by the formation of the model to the clinical outcomes to recognize and treat the most deleterious factors in each patient and by the data-mining of the clinical parameters to uncover the combinational deleterious factors from the clinical database to the model formation of pathophysiology and treatment of heart failure.

CURRICULUM VITAE

NAME: Tze-Fan Chao, M.D., Ph.D. (趙子凡)

台北榮民總醫院心臟內科主治醫師
國立陽明大學內科學系助理教授

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

Member, Taiwan Society of Internal Medicine

Member, Taiwan Society of Cardiology

Member, Taiwan Heart Rhythm Society

Member, Practical Guideline subcommittee, Asia-Pacific Heart Rhythm Society

Member, Cardiac Implantable Devices subcommittee, Asia-Pacific Heart Rhythm Society

Member of Writing Committee, Taiwan Society of Cardiology/Taiwan Heart Rhythm Society

AF Guidelines 2016 Task Force

Member of Writing Committee, APHRS consensus document on stroke prevention in atrial fibrillation 2016 Task Force



How to do Big Data Research? AF as an Example

Tze-Fan Chao M.D., Ph.D. (趙子凡)

Taipei Veterans General Hospital and National Yang-Ming University, Taipei, Taiwan

台北榮總心臟內科，國立陽明大學

More and more large-scale studies were published using the data of the national insurance registry from Taiwan, Denmark and Sweden. There are several advantages of the nationwide insurance database, including the large sample size, no selection bias, long-term follow up and the ability to investigate some topics which can't not be studied in the trial setting. However, some biases should be kept in mind when designing or performing studies utilizing these registry database, such as the selection bias, immortal time bias, etc. Some additional information is important and necessary to improve the diagnostic accuracies of the diseases defined by the ICD codes. For example, we could define patients with diabetes only when they receive treatments with oral antidiabetic drugs or insulin. Also, the operative or procedural codes are helpful, such as the coronary stenting for the diagnosis of coronary artery disease. A well-designed nationwide study with careful interpretations of the results could be able to provide important information which is clinically relevant.

CURRICULUM VITAE

姓名：李政翰

最高學歷：

國立臺灣大學醫學院醫學系

國立成功大學醫學院臨床藥學研究所博士

經歷：

2000/9-2001/6 奇美醫院內科部住院醫師

2001/7-2003/7 成大醫院內科部住院醫師

2003/8-2005/7 成大醫院心臟科研究員

2005/8-2007/8 成大醫院斗六分院心臟內科主治醫師

2008/7-2008/8 日本Sekishinkai Sayama Hospital 心導管室研究員

2005/9-2009/8 中華民國心臟醫學會幹事

2006/9-2010/7 成大醫學院醫學系臨床講師

2010/8-2015/1 成大醫學院醫學系助理教授

現職：

2005/8-至今 成大醫院心臟內科主治醫師

2010/8-至今 成大醫院心導管室主任

2015/2-至今 成大醫學院醫學系副教授

2016/7-2018/5 中華民國心臟醫學會副秘書長

2014-2018 中華民國介入性心臟醫學會周邊血管介入委員會委員

2014-2018 中華民國介入性心臟醫學會編輯暨登錄委員會

學會會員：

台灣醫學會

台灣內科醫學會

中華民國心臟醫學會

中華民國介入性心臟醫學會



Research Based on National Health Insurance Research Database: Advantage and Limitation

李政翰

Taiwan launched a single-payer National Health Insurance program on March 1, 1995. As of 2014, 99.9% of Taiwan's population were enrolled. The database of this program contains registration files and original claim data for reimbursement. Large computerized databases derived from this system by the National Health Insurance Administration (the former Bureau of National Health Insurance, BNHI), Ministry of Health and Welfare (the former Department of Health, DOH), Taiwan and maintained by the National Health Research Institutes, Taiwan, are provided to scientists in Taiwan for research purposes.

Data in the National Health Insurance Research Database (NHIRD) that could be used to identify patients or care providers, including medical institutions and physicians, is scrambled before being sent to the National Health Research Institutes for database construction and is further scrambled before being released to each researcher. Theoretically, it is impossible to query the data alone to identify individuals at any level using this database. Based on the registration files and original claim data in NHIRD, specific data subsets are constructed for research purposes.

There are several limitations in the present NHIRD. First, the healthcare claims data inherently contains potential disease misclassification bias. However, the auditing mechanism conducted by the Bureau of National Health Insurance would help to minimize the diagnostic uncertainty and misclassification in claims databases. Second, the true incidence of the diseases may be underestimated because some patients may die suddenly without accurate diagnosis and some patients have asymptomatic disease. Furthermore, we usually used the discharge status to identify mortality from a hospitalization in the study. It is possible that some of the deaths were not reported captured, therefore, we might have underestimated disease mortality rate. Finally, the healthcare claims data did not contain body mass index, smoking status data, lab or image results. It is very difficult to evaluate the severity of the disease so we cannot conduct the study needing the disease severity or lab, image data.



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Dinner Symposium

地點：財團法人張榮發基金會八樓 803

日期：106 年 9 月 23 日 17:30-18:25

| Time | Topic | Speaker | Moderator |
|-------------|--|---------------------------|-----------|
| 17:30-17:35 | Opening Remarks | | 李貽恆 教授 |
| 17:35-18:15 | Gout and Cardiovascular Disease: What is the Linkage Between These Two Old Diseases? | Prof. Fernando Perez Ruiz | |
| 18:15-18:25 | Panel Discussion | | |
| 18:25-18:30 | Closing Remarks | | |

CURRICULUM VITAE

NAME: Fernando Pérez-Ruiz, MD, PhD

Fernando Pérez-Ruiz, MD, PhD, is a Senior Specialist of the Rheumatology Division in Hospital Universitario Cruces, Head of the Investigation Group for Arthritis at BioCruces Health Research Institute, and Associated Professor of the Department of Medicine in the Basque Country University in Vizcaya, Spain

He received his MD from Basque Country University and a PhD in from Barcelona University with a clinical investigation program on classification and treatment of hyperuricemia in gout. Board certified in Rheumatology after a fellowship at Hospital Ramón y Cajal, Madrid.

Dr. Pérez-Ruiz is a member of the Spanish Society for Rheumatology and the American College of Rheumatology. He has collaborated with the European League Against Rheumatism (EULAR) Task Force for Gout and for Calcium Pyrophosphate Disease, the ACR Guidelines for gout, the OMERACT special interest group for gout, and the T2T initiative. Vice-president and Coordinator of Continuing Education of the Spanish Society for Rheumatology (SER) from 2014, Spanish representative in the EULAR Education and Training Committee from 2016, and a member of the Rheumatology Board Commission in the Spanish Health Ministry from 2014 to 2016. He founded and coordinated the Crystal-induced Arthritis Study Group (GEAC-SER) and the SER-Guidelines for the management of gout.

He has served for the last years in the editorial boards of *Arthritis Rheumatism*, *Arthritis Care & Research*, *Bone Joint Spine*, *Reumatología Clínica*, and *Rheumatology & Therapy*, as Associate Editor of *Rheumatology International*, and as an invited reviewer for more than 30 international journals. His research interests include crystal-induced arthritis, and especially gout, but has also investigated and published on CPPD, lupus, rheumatoid arthritis, and fibromyalgia.

Dr. Pérez-Ruiz has delivered over 100 lectures, published more than 150 articles and book chapters, and presented over 200 scientific abstracts in rheumatology meetings on topics relating to diverse rheumatology diseases, and most frequently to hyperuricaemia and gout, gathering a cumulated impact factor over 1,000, and h-index 36.



Gout and Cardiovascular Disease: What is the Linkage Between These Two Old Diseases?

Prof. Fernando Perez Ruiz

The 17th Taipei International Vascular Biology Symposium Plenary Session

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 24 日 09:00~11:30

| Time | Topic | Speaker | Moderator |
|-------------|--|---------------------------|-----------|
| 09:00-09:05 | Opening Remarks | | 葉宏一 理事長 |
| 09:05-09:35 | Do Statins Cause Diabetes and What is the Mechanism? | Prof. Kausik Ray | 林幸榮 名譽理事 |
| 09:35-09:40 | Discussion | | |
| 09:40-10:10 | Anti-inflammatory Nano-Medicines for Cardiovascular Disease | Prof. Kensuke Egashira | 吳造中 名譽理事 |
| 10:10-10:15 | Discussion | | |
| 10:15-10:45 | Development of Peptide and DNA Vaccine Targeting Cardiometabolic Disease | Prof. Ryuichi Morishita | 陳肇文 名譽理事 |
| 10:45-10:50 | Discussion | | |
| 10:50-11:00 | Coffee Break | | |
| 11:00-11:25 | Statin Myopathy | Dr. Lourdes Ella G Santos | 劉秉彥 常務理事 |
| 11:25-11:30 | Discussion | | |

CURRICULUM VITAE

NAME: Prof. Kausik Ray



Do Statins Cause Diabetes and What is the Mechanism?

Prof. Kausik Kumar Ray, MD., MPhil.

*Imperial Centre for Cardiovascular Disease Prevention,
Department of Public Health and Primary Care,
School of Public Health, Imperial College London, UK*

A meta-analysis comparing statins with placebo looked at over 93,000 patients showed that statins increased the risk of diabetes by 9%, with one additional case reported for every 1,000 person-years of treatment. At the same time, between five and seven cases of cardiovascular disease were prevented, thus the net benefit of statins favoured their use. A second meta-analysis of high- versus low- or moderate-intensity statins showed that the risk of diabetes was increased by a further 12% whilst at the same time preventing three cases of cardiovascular disease for every additional case of diabetes reported. The risk of diabetes with statins was not observed equally by all subjects and was more likely when subjects were older, had impaired fasting glucose and metabolic syndrome.

Using genetic variants as proxies for drug targets we tested the impact of genetic variation in HMGCoA reductase and observed that SNPs with a lower level of activity in HMGCoA had lower LDL-C, higher BMI, greater W/H ratio, waist circumference, weight, glucose and insulin levels and greater risk of DM. In statin trials weight is also significantly higher.

None of the statin meta-analyses previously included Pitavastatin, the newest of all the statins. J-PREDICT was the first prospective study using formal evaluation of glucose measurements to assess whether Pitavastatin increased the risk of diabetes. It demonstrated that diabetes was actually reduced by 18%. An independent meta-analysis of approximately 15 trials of Pitavastatin, reporting on more than 4,000 individuals, supported these observations. It demonstrated no significantly different effect of Pitavastatin on glucose, HbA1c, or risk of diabetes. There was no evidence of a dose effect or increase in risk with increased duration of therapy. These findings lead to the European Medicines Agency to give Pitavastatin a label for glucose neutrality.

CURRICULUM VITAE

NAME: Professor Kensuke Egashira, M.D., Ph.D., FAHA, FESC, FJCS

Kensuke Egashira, MD, PhD is Professor in the Department of Cardiovascular Research, Development, and Translational Medicine, Kyushu University Faculty of Medicine in Fukuoka, Japan (<https://cardiol-test.wp.med.kyushu-u.ac.jp/general/staff/institute/>).

He graduated from Kyushu University School of Medicine in 1981, and completed his training in internal medicine and cardiology at Kyushu University Hospital. After he received his PhD in medical science in 1988, he joined the Department of Cardiovascular Medicine at Harvard Medical School Beth Israel Hospital as a research fellow in 1988-90, and was a member in charge of one area of the NIH Program Project Grant. After back to Japan, he was appointed assistant professor in 1990, lecturer in 1995, associate professor in 2005, professor in 2011 in the Department of Cardiovascular Medicine at Kyushu University School of Medicine.

He has received numerous awards and recognitions for his research accomplishments (a Sato Prize from Japanese Circulation Society, a Science and Technology Prize from the Ministry of Education, Culture, Sports, Science and Technology, Japan etc). His current major research focus is on the role of inflammation in atherosclerotic vascular diseases and on application of nanotechnology-based drug-delivery system (DDS) for the development of innovative therapeutic strategy and molecular imaging technology.

As principal investigator, he leads several National Translational Research Programs of Nanomedicine, which comprises the development of innovative drug-incorporated nanoparticles for treatment/diagnosis of pulmonary hypertension, organ ischemia, ischemia-reperfusion injury, and vulnerable atherosclerotic plaques etc.

As authors and mentor on cardiovascular medicine and vascular biology, Dr. Egashira has published extensively in medical journals including *Circulation*, *Journal of Clinical Investigation*, *New England Journal of Medicine*, *Lancet*, etc. His bibliography at 2012 includes follows: 253 original papers, 9 case reports, 9 reviews, 13 Letter etc., 6 books

Impact factor: total=2096.96, average=8.701/article, Citation index: total=12063, average=50/article

Dr. Egashira has a number of professional memberships including Japanese Circulation Society (Councilor and Fellow), Japan Atherosclerosis Society (Councilor and Fellow), Japanese Society of Vascular Biology and Medicine (Trustee), American Heart Association (Fellow), and European Society of Cardiology (Fellow). He serves as the editorial board member of International Medical Journals.

Dr. Egashira has 26 items of issued or filed patents. He has a particular interest in promotion of his basic research findings to clinical medicine, and served as the principal medical advisor for venture business companies.



Anti-inflammatory Nano-Medicines for Cardiovascular Disease

Professor Kensuke Egashira

Administration of medicines has been the central strategy to treat cardiovascular diseases; however, is hampered by insufficient effectiveness and adverse effects. The application of drug delivery system (DDS) is a feasible approach to overcome the limitations of current medicinal treatment. Recently, nano-sized materials are actively developed as DDS including micelles, liposomes, polymeric nanoparticles, dendrimers, carbon nanotubes, and crystalline metals.

Inflammation mediated by innate immune cells play critical roles during the development of cardiovascular diseases. For example, atherosclerotic plaque destabilization and rupture account for the majority of acute myocardial infarction, for which Ly6Chigh inflammatory monocytes and macrophages play critical roles. In order to regulate inflammation in cardiovascular diseases, we have developed polymeric nanoparticle-dependent DDS, which modifies in vivo drug kinetics, depending on vascular permeability in inflamed organs and incorporation by mononuclear phagocytic system that constitute 'passive-targeting' property.

Among currently available medicines, HMG-CoA reductase inhibitors, statins, have been shown to exhibit anti-inflammatory effect along with lipid-lowering effect and reduce risks of cardiovascular events. We have developed nano-medicine that encapsulates statin, pioglitazone, and irbesartan in polymeric nanoparticles to optimize anti-inflammatory property of statins. Those drug-incorporated nano-medicine reduced the number of Ly6Chigh inflammatory monocytes in the peripheral blood, and reduced the infiltration of monocyte-derived macrophages in the atherosclerotic plaques more effectively compared with the drug alone. The drug-incorporated nano-medicine finally stabilized atherosclerotic plaques and prevented plaque ruptures in the mouse model, proving the concept of nano-medicine. Anti-inflammatory effect of the nano-medicine is now being tested in various disease models including ischemia-reperfusion injury and ventricular remodeling after acute myocardial infarction.

In this review article, we describe current development of DDS and discuss future perspective on the application of nano-medicine to treat life-threatening cardiovascular diseases.

CURRICULUM VITAE

NAME: Morishita Ryuichi**CARRIER:**

| | | |
|-----------------|---|---|
| 4/81-3/87 | MD (3/87) | Osaka University Medical School, Osaka, Japan Medicine |
| 4/87-3/91 | PhD (3/91) | Osaka University Medical School, Osaka, Japan Medicine |
| 4/91-8/91 | Postdoctoral Fellow | Osaka University Medical School Department of Geriatric Medicine (T. Ogihara) |
| 8/91-4/94 | Postdoctoral Fellow | Stanford University School of Medicine, Division of Cardiovascular Medicine (Victor J. Dzau) |
| 5/94-96/9 | Senior Research Associate | Osaka University Medical School Department of Geriatric Medicine (T. Ogihara) |
| 5/94-96/8 | Visiting Instructor | Stanford University School of Medicine, Division of Cardiovascular Medicine (Victor J. Dzau) |
| 4/95-96/9 | Research Fellow of the Japan Society for the Promotion of Science | |
| 10/96-10/98 | Assistant Professor | Department of Geriatric Medicine (T. Ogihara) Osaka University Medical School |
| 5/94-present | Chief | Section of Gene Therapy Department of Geriatric Medicine (T. Ogihara) Osaka University Medical School |
| 10/98-03/2004 | Associate Professor | Department of Geriatric Medicine (T. Ogihara) Osaka University Medical School |
| 10/98-03/2004 | Associate Professor | Division of Gene Therapy Science (Y. Kaneda) Osaka University Medical School |
| 10/98-03/2004 | Chief | Section of Cardiovascular Medicine Division of Gene Therapy Science (Y. Kaneda) Osaka University Medical School |
| 01/2000-present | Visiting Professor | The University of Hong Kong |
| 03/2003-present | Professor | Department of Clinical Gene Therapy Osaka University Medical School (Donated by Dai-ichi Pharmaceutical) |



Development of Peptide and DNA Vaccine Targeting CardioMetabolic Disease

Ryuichi Morishita

Professor, Department of Clinical Gene Therapy, Osaka University

Recent progress on vaccination has extended its scope from infectious diseases to common disease such as hypertension, diabetes and hypercholesterolemia. Currently, we have developed peptide and DNA vaccines against Angiotensin II (AngII) for hypertension, DPP4 for diabetes, and PCSK9 as well as apolipoprotein (a) for hypercholesterolemia as BioAlternative. For example, in the initial study, we selected AngII as a target antigen to treat hypertension, because it is low serum level. Plasmid vector encoding Hepatitis B core (HBc)-Ang II fusion protein was injected to spontaneously hypertensive rats (SHR) by needle less injection system. As a result, anti-Ang II antibody was successfully produced in vaccine group and sustained at least up to 6 months. Consistently, systolic BP was lower in vaccine group after the immunization, and BP reduction was continued at least up to 6 months. Interestingly, vaccine against Ang II attenuated the worsening cardiac function after myocardial infarction and brain ischemia after stroke. Phase I/IIa study will be started soon. Future development of peptide as well as DNA vaccine to treat adult common disease might provide new therapeutic option. In this lecture, I will introduce recent progress in vaccine to treat cardiometabolic disease.

CURRICULUM VITAE

NAME: Dr. Lourdes Ella G Santos

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POSTGRADUATE EDUCATION:

October 2011- Preventive Cardiology, Hypertension and Clinical Lipidology Fellowship
 October 2010 New York University (NYU), Manhattan New York, USA
 September Cardiology Fellowship
 2009- Cardiovascular Institute
 April 2005 Cardinal Santos Medical Center, Philippines
 May 2004- Internal Medicine Residency
 July 2001 State University of New York Downstate (SUNY Downstate), Brooklyn New York, USA
 1998-1999 Internship, Philippine General Hospital (UP-PGH), Manila, Philippines
 1994-1998 Medical Degree University of the Philippines College of Medicine Manila (UPCM)

PRIMARY EDUCATION:

1990-1994 BS Biology, University of the Philippines (UP Diliman)
 1986-1990 Secondary Education, Garden International School, Kuala Lumpur, Malaysia
 1984-1986 Intermediate Education, Garden International School, Kuala Lumpur, Malaysia
 1981-1984 Primary Education St. Theresa's College, Quezon City, Philippines

BOARD CERTIFICATIONS AND LICENSURE EXAMINATIONS:

May 2012 Diplomate, Philippine Specialty Board of Adult Cardiology (PHA SBAC PCC Specialty Board)
 January 2012 Diplomate, Philippine Specialty Board of Internal Medicine (PCP Specialty Board)
 October 2011 Diplomate, American Board of Clinical Lipidology (ABCL Specialty Board Exam)
 May 2011 Diplomate, American Society of Hypertension (ASH Specialty Board Exam)
 August 2004 Diplomate, American Board of Internal Medicine (ABIM)
 March 2003 United States Medical Licensing Examination 3 (USMLE 3)
 January 2001 Certified by the Educational Commission for Foreign Medical Graduates
 November 2000 Clinical Skills Assessment Examination (CSA)
 November 2000 United States Medical Licensing Examination: Clinical Science (USMLE 2)
 August 2000 Test of English as a Foreign Language (TOEFEL)
 August 2000 United States Medical Licensing Examination: Basic Science



Statin Myopathy

Lourdes Ella G Santos

Statin use globally and locally continues to increase with growing awareness of its benefits both among physicians and patients. And of course with increasing number of use, we continue to see a rising number of adverse effects, one of which is statin myopathy. There is a big discrepancy of reported myopathy in trials and clinical practice with a prevalence of 5% among patients in randomized trials and as high as 20% of patients in clinical practice. The causes of statin myopathy are poorly understood and there continues to remain several schools of thought. The role of early identification and recognition therefore lies in us clinicians. Baseline documentation of muscle aches and pains should be identified prior to starting statin therapy and understanding confounding risk factors for the development of statin myopathy may limit the occurrence of this unfavorable side effect.

Research Award & Poster Competition

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 24 日 12:00~12:45

| Time | Topic | Speaker | Moderator |
|-------------|---|----------------------------|-----------|
| 12:00-12:30 | Genetic Screening of Familial Hypercholesterolemia with DNA Mass Spectrometry | 常敏之 教授 | 王 寧 理事 |
| 12:30-12:45 | Poster Competition | 蘇正煌 醫師 簡世杰 醫師 劉彥佑 醫師 | |

CURRICULUM VITAE

姓名：常敏之醫師

學歷：

1983/6 月 國立台灣大學醫學系醫學士 (M.D.)

1997/7 月 美國 Baylor College of Medicine 心臟學博士 (Ph.D.)

經歷：

2008-2009 台北榮總心臟內科加護病房主任

1988-1998 國立陽明大學內科講師

1998-2011 國立陽明大學內科部定副教授

現任：

2010 台北榮總心導管室主任

2011 國立陽明大學內科部定教授

榮譽：

1995 美國心臟學會青年醫師獎

1997 美國貝勒醫學院內科最佳論文獎

1999 國軍退除役官兵輔導委員會年度研究發展報告
「轉殖 TGF 接受器基因對小白鼠心臟之影響」特優獎

2000 台北榮民總醫院教學優良醫師獎

2008 中華民國血脂及動脈硬化學會最佳論文獎

2008 台北榮民總醫院教學優良醫師獎

專科學會：

1989- 目前 中華民國內科醫學會專科醫師

1987- 目前 中華民國心臟學會專科醫師

2008- 目前 中華民國心臟學會介入專科醫師

2012- 目前 台灣介入性心臟血管醫學會專科醫師

2011- 目前 台灣重症醫學專科醫師 (重症聯合甄選委員會)

2000-2003 中華民國血脂及動脈硬化學會秘書長

2001-2006 中華民國重症醫學會學術委員會副主任委員

2012-2014 中華民國心臟學會監事暨介入性心臟學委員會主任委員

2003- 目前 中華民國血脂及動脈硬化學會常務理事

2014-2016 台灣介入性心臟血管醫學會常務理事暨甄審委員會主任委員

2014-2016 中華民國心臟學會副理事長

2016- 目前 台灣介入性心臟血管醫學會常務理事暨財務委員會主任委員

2016- 目前 中華民國心臟學會理事暨兩岸暨國際委員會主任委員



Genetic Screening of Familial Hypercholesterolemia with DNA Mass Spectrometry

Min-Ji Charng, MD, PhD

Professor of Medicine, Taipei Veterans General Hospital and National Yang-Ming University

Familial hypercholesterolemia (FH) is a heterogeneous autosomal dominant disease. The genetic heterogeneity of FH requires low-cost, high-throughput, and rapid mutation detection technology to efficiently integrate genetic screening into clinical practice. We designed a custom Agena iPLEX assay to detect 68 point mutations on FH-causing genes. First, the assay performance was verified by analyzing 180 previously sequenced subjects (120 with point mutations and 60 healthy controls), with the results being compared with those of Sanger DNA sequencing. Second, a blind study was carried out on 185 FH probands (44 definite FH and 141 probable/possible FH). In the first part of this study, only 1 discrepancy was found between the Agena iPLEX and Sanger sequencing genotyping results. In the blind study, a total of 62 probands with mutations were identified by both techniques. Five mutations were detected by Sanger sequencing assay only. The detection sensitivity and specificity rates of Agena iPLEX were 92.5% and 100%, respectively. The hands-on time for the Agena iPLEX assay was around 1 day. Therefore, the custom-designed Agena iPLEX assay has high specificity and sensitivity for FH genetic screening. Considering its low cost, rapidity, and flexibility, the assay has great potential to be incorporated into FH screening in Taiwan.

CURRICULUM VITAE

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EDUCATION:

1982-1989 M.D. Undergraduate School
China Medical University, TAIWAN
Sep 2002-May 2006 Postgraduate School
Ph.D. School of Medicine and Biomedical Sciences, University of
Sheffield, United Kindom

ADMINISTRATIVE APPOINTMENTS:

2007-2009 June Administrative Leader, 38 Medical Ward (Tamshui branch), MMH
2009 July-2013 July Director, Intensive Care Unit (Tamshui branch), MMH
2013 Sep- Program Director of Education Services, Department of Internal
Medicine, MMH, Taipei
2015 July 1- Director, Division of Cardiology, MMH, Taipei
2016 Feb 1- Chief, Cardiovascular Centre, MMH, Taipei
2016 May 1- Director, Division of Heart Failure, MMH, Taipei

FACULTY OF MEDICINE:

Associate Professor of Medicine, Mackay Medical College
Clinical Professor of Medicine, National Defense Medical Center

ACADEMIC SOCIETY:

Nov 2016- Board of Supervisor (監事), The Society of Ultrasound in Medicine, Republic
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蘇正煌



CURRICULUM VITAE

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EDUCATION:

2002-2008 MD : Taipei Medical University

POSTGRADUATE TRAINING AND POSITIONS:

2013-2014 Cardiovascular Medicine, MacKay Memorial Hospital, Taipei, Taiwan

2014- Critical Care medicine, MacKay Memorial Hospital, Taipei, Taiwan

MEMBERSHIP AND PROFESSIONAL SOCIETIES

2011 Board of Internal Medicine, R.O.C.

2011 Member of the Taiwan Society of Internal Medicine

2013 Member of the Taiwan Society of Cardiology

2014 Taiwan Society of Intensive Care Medicine

2015 Member of the Taiwan Society of Cardiovascular Interventions

2015 Member of Taiwan Society of Lipids and Atherosclerosis



簡世杰



CURRICULUM VITAE

姓名：劉彥佑



劉彥佑



Lunch Symposium

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 24 日 12:45~13:50

| Time | Topic | Speaker | Moderator |
|-------------|---|----------------------|-----------|
| 12:45-12:50 | Opening Remarks | | 陳肇文 名譽理事 |
| 12:50-13:15 | The Appropriate DAPT Duration for Acute Coronary Disease Patients | 李貽恆 秘書長 | |
| 13:15-13:40 | Outcome Trial and Real-world Evidence of SGLT2i: What's the Evidence Say? | 台北醫學大學附設醫院 黃群耀 醫師 | 葉宏一 理事長 |
| 13:40-13:50 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE

姓名：李貽恆醫師

現職：

國立成功大學醫學院附設醫院心臟內科主任及主治醫師

國立成功大學醫學院內科學科教授

學歷：

09/1981-06/1988 高雄醫學大學醫學系醫學士

09/1996-06/2000 國立成功大學醫學院基礎醫學研究所博士

經歷：

09/1990-08/1995 國立台灣大學醫學院附設醫院內科部住院醫師

08/1995-08/1996 國立成功大學醫學院附設醫院內科部主治醫師

08/1996-08/2000 國立成功大學醫學系內科學科講師

08/2000-08/2008 國立成功大學醫學系內科學科副教授

08/2008-迄今 國立成功大學醫學系內科學科教授

中華民國心臟學會副秘書長

中華民國血脂及動脈硬化學會理事

研究主題：

動脈硬化的病態生理學

高血壓、高脂血症、冠狀動脈心臟病的分子遺傳研究

血管生物學

研究成果：

已發表100多篇研究論文於國際SCI醫學期刊，包括*Journal of the American College of Cardiology*, *European Heart Journal*, *Cardiovascular Research*, *Chest*, *American Journal of Cardiology*, *Thrombosis and Haemostasis*等



The Appropriate DAPT Duration for Acute Coronary Disease Patients

李貽恆



CURRICULUM VITAE

姓名：黃群耀 (Chun-Yao, Huang)

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台北醫學大學附設醫院心臟血管研究中心主任
台北醫學大學附設醫院心臟內科主治醫師
台北醫學大學醫學系內科學科教育部部定副教授
台北醫學大學聯合人體試驗委員會審查委員
台灣高端醫療教授協會理事
台北醫學大學碩士生指導老師
台北醫學大學博士生指導老師

醫療專長：

心臟冠狀動脈血管成型擴張術、心臟影像學(經胸及經食道心臟超音波，心臟磁振造影，心臟電腦斷層檢查)、心臟衰竭、高血壓、高血脂、動脈硬化治療及研究、一般醫學教育

經歷：

2009-2012 台北醫學大學醫學系教育部部定助理教授
2005-2009 台北醫學大學醫學系教育部部定講師
2005-2011 台北醫學大學附設醫院一般醫學科主治醫師
2006-2009 台北榮民總醫院心臟內科心臟科專/兼任主治醫師
2004-2005 台北榮民總醫院心臟內科心臟科研究員
2001-2004 台北榮民總醫院心臟內科心臟科總醫師
1998-2001 台北榮民總醫院內科部內科住院醫師
1998 台北市立仁愛醫院內科部內科住院醫師
1997-1998 台北榮民總醫院實習醫師
1996-1997 台北榮民總醫院見習醫師

學歷：

台北醫學大學醫學系畢業
台北醫學大學臨床醫學研究所博士班畢業

學會資歷：

2008- 台灣超音波醫學會學術委員會委員
2010-2013 台灣心臟學會兩岸事務委員會委員
2013- 台灣心臟學會健保事務委員會委員



Outcome Trial and Real-world Evidence of SGLT2i: What's the Evidence Say?

黃群耀

糖尿病會有許多併發症，尤其是發生心肌梗塞及中風機率致死率要高出一般人！血糖控制長期可減少糖尿病患心血管事件風險，UKPDS 研究證實積極的血糖控制，長期追蹤 (>10 年) 是有心血管風險減少好處。

2008 年 FDA 要求所有新上市降血糖藥，都必須進行 CVOT 試驗：3 DPP4i (SAVOR-TIMI/EXAMINE/TECOS) 試驗結果呈現 Neutral CV outcome；2 GLP1 RA (LEADER/SUSTAIN-6) 呈現 Positive CV outcome；已發表的 2 SGLT2i (EMPA-REG/CANVAS+CANVAS-R) 也呈現 Positive CV outcome，然而有 CVD 病患僅佔糖尿病患 21.6%，Declare 收錄 60% Non-CVD 糖尿病患，預計 2019 發表。

實際臨床使用 SGLT2i 是否也能減少心血管事件風險，最新收錄 6 個國家，涵蓋將近 140 萬病患的 CVD-Real Study 可以窺見臨床上使用 SGLT2i 的結果。

此外，SGLT2i 的機轉是甚麼？導致有心臟血管方面好處？將進一步分析探討，讓臨床醫師在選擇糖尿病用藥時，一併心血管疾病風險同時納入考量。

DM Symposium

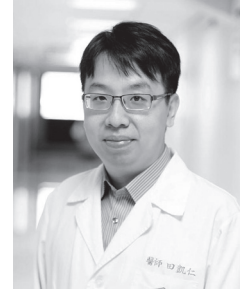
地點：財團法人張榮發基金會八樓 802

日期：106 年 9 月 24 日 09:00~10:50

| Time | Topic | Speaker | Moderator |
|-------------|---|---------|-----------|
| 09:00-09:05 | Opening Remarks | | 許惠恒 常務監事 |
| 09:05-09:35 | Overview of Cardiovascular Effects of SGLT2 Inhibitor | 田凱仁 醫師 | |
| 09:35-10:05 | What is New in Diabetes Cardiomyopathy | 李亭儀 醫師 | 郭清輝 教授 |
| 10:05-10:35 | Lipid Management in Patients with Diabetes Mellitus: Has the Dawn of a New Era Arrived? | 胡啓民 教授 | |
| 10:35-10:50 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE

姓名：田凱仁 (Kai-Jen Tien)
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現職：
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學歷：
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2006-2008 高雄醫學大學醫學研究所臨床組碩士班

經歷：
2002-2005 高醫附設醫院 內科部住院醫師
2005-2007 高醫附設醫院 內科部總住院醫師
2007-迄今 永康奇美醫院內分泌科主治醫師
2009/2 教育部部訂講師
2013/7 教育部部定助理教授

研究領域：
糖尿病、甲狀腺、腎上腺、腦下垂體、骨質疏鬆、血脂異常、代謝異常疾病

Overview of Cardiovascular Effects of SGLT2 Inhibitor

Kai-Jen Tien^{1,2}

¹*Division of Endocrinology and Metabolism, Department of Internal Medicine,
Chi Mei Medical Center, Tainan, Taiwan*

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The increased risk of cardiovascular disease in type 2 diabetic patients has been known for decades. However, until recently the cardiovascular (CV) impact of glucose lowering strategies has been inadequately understood. Major clinical trials have now investigated the impact of intensification of glycemic control upon CV outcomes, as well as the CV effects of glucose management with newer antihyperglycemic agents. Dipeptidyl peptidase-4 (DPP4) inhibitors, glucagon-like peptide-1 (GLP-1) analogs and sodium-glucose cotransporter 2 (SGLT2) inhibitors are relatively new therapies for the treatment of type 2 diabetes mellitus. Given the high prevalence of cardiovascular complications in patients with type 2 diabetes and recent concerns questioning CV safety of newer antidiabetic medications, cardiovascular safety of these medications requires evaluation.

Multiple CV safety trials designed to meet regulatory requirements for CV safety of antihyperglycemic medications have been initiated. The results of several completed CV outcomes trials clarify the risks and benefits associated with newer medications used to manage hyperglycemia in patients with type 2 diabetes, particularly in individuals at high CV risk. Important differences have been noted with respect to heart failure outcomes within the DPP4 inhibitor class, and thus far one agent in the SGLT2 inhibitor class has been found to significantly reduce rates of important CV outcomes. Robust safety related information from trials designed to assess the CV effects of diabetes therapies will permit the incorporation of outcomes-based evidence into the formulation of diabetes care guidelines.

The latest evidence from EMPA-REG OUTCOME trials indicates that empagliflozin have cardiovascular benefits that may prove to be of clinical importance in the management of type 2 DM. Hemodynamic effects, such as reductions in blood pressure and intravascular volume, and involving osmotic diuresis, may provide a more plausible explanation. Metabolic effects, such as cardiac fuel energetics, and hormonal effects, such as increased glucagon release, may also contribute to the results observed during EMPA-REG OUTCOME.

CURRICULUM VITAE

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學歷：

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1981/06-1985/04 University of Santo Tomas, Doctor of Medicine醫學士
1978/06-1981/03 University of Santo Tomas, Bachelor in Science (Accelerated)大學

現職：

2013/07-至今 台北醫學大學醫學系、一般醫學科專任副教授
2015/07-至今 台北醫學大學 醫學系、內科學、內分泌新陳代謝科 主任
2016/03-至今 台北醫學大學·市立萬芳醫院內科部內分泌新陳代謝科主任
1997/09-至今 台北醫學大學·市立萬芳醫院內科部內分泌新陳代謝科糖尿病中心
主任

經歷：

1989/07-1994/06 中心診所醫院內科部住院及部總醫師
1994/08-1996/07 台北榮民總醫院內科部內分泌新陳代謝科臨床研究員
1996/07-1999/06 台灣糖尿病衛教學會理事
2005/07-至今 台灣糖尿病衛教學會會員代表
2011/07/01-至今 台灣內科醫學會會員代表
2012/01-至今 台灣醫學教育學會認證OSCE考官
2012/04/01-2019/03/31 中華民國內分泌學會理事
2013/07-2019/06 台北市役男審議委員會委員

專長：

糖尿病之研究
內分泌疾病之研究
基礎醫學
臨床醫學及藥物



What is New in Diabetes Cardiomyopathy

李亭儀

The global burden of type 2 diabetes mellitus (DM) has evolved rapidly in recent years and this markedly increase the risk of cardiovascular complications. Diabetic cardiomyopathy (DC) is a cardiac dysfunction characterized by initial impairment of left ventricular relaxation followed by left ventricular contractile dysfunction which affects about 12% DM patients, and is independent of coronary artery disease and hypertension. Nevertheless, the existence of DC continues to be a topic of controversy, and the pathophysiological mechanisms remains poorly understood. Several factors including altered lipid metabolism, mitochondrial dysfunction, oxidative stress, endoplasmic reticulum stress, inflammation, as well as epigenetic changes are implicated in the development of DC. Despite a recent rise in research interrogating the mechanisms of DC, there remains a lack of specific treatment strategies. The emergence of glucose-optimizing agents, such as glucagon-like peptide-1 agonists and sodium/glucose co-transporter (SGLT)2 inhibitors confer benefits on cardiovascular outcomes, and these would likely result in a major clinical impact.

CURRICULUM VITAE

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現職：

2009/03 臺北榮民總醫院內科部內分泌新陳代謝科主治醫師

經歷：

2003/02-2006/08 國立陽明大學醫學系專任副教授

1997/04-2009/02 臺北榮民總醫院內科部健診科主治醫師

1994/07-1997/04 臺北榮民總醫院內科部總醫師

1990/09-1994/06 臺北榮民總醫院內科部住院醫師

1988/09-1990/09 楠梓榮民醫院內科醫師

專長：

高血脂症

代謝症候群

Hypertension

糖尿病



Lipid Management in Patients with Diabetes Mellitus: Has the Dawn of a New Era Arrived?

Chii-Min Hwu, MD

*Section of Endocrinology and Metabolism, Department of Medicine,
Taipei Veterans General Hospital, Taipei 112, Taiwan*

The burden of coronary heart disease (CHD) in patients with diabetes (DM) is substantial. Patients with DM are associated with a 2- to 4-fold increase in the incidence of CHD and have an elevated risk of premature death compared with people without DM. Existing evidence convincingly indicates that DM patients can benefit from treatments of statins in both primary and secondary prevention of CHD. Based on compelling evidence, current treatment guidelines have strongly recommended the use of statins in patients with diabetic dyslipidemia.

Despite the widespread dissemination of treatment guidelines, it has been suggested that statins were underutilized in patients with DM in practice. In Taiwan, 30 % of DM patients who already had coexisting CHD did not receive statin treatments. The reasons for statin underutilization are unclear. Men, patients younger than 45 years, and those without CHD were less likely to receive statin therapy. Given the increasingly prevalence of DM in Taiwan, high priority should be given to improving the use of statins among patients with DM, especially among those with concomitant CHD.

On the other hand, evidence shows that targeting LDL-C levels of 100 or 70 mg/dL using high- or low-intensity statin therapy did not reduce the prevalence of atherogenic dyslipidemia in the study populations. Furthermore, aggressive statin therapy could not be suitable for all patients. Other methods should be sought to decrease the residual cardiovascular risk.

Addition of ezetimibe to statin therapy has shown modest benefit. Some glucose-lowering medications and bariatric surgery may also improve diabetic dyslipidemia. Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) inhibitors are currently the most attractive new target for modulation of plasma lipid levels, especially LDL and lipoprotein (a). Due to overwhelming clinical efficacy with significant improvement in CV outcomes, statins will continue to be the most important and first line drugs for treatment of diabetic dyslipidaemia. We hope the recently approved PCSK9 inhibitors may contribute to reduction of the residual atherosclerotic risk observed in T2DM treated with statins.

 **MEMO**

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Nutrition and Diet Symposium

地點：財團法人張榮發基金會八樓 802

日期：106 年 9 月 24 日 11:00~12:45

| Time | Topic | Speaker | Moderator |
|-------------|--|---------------------|-------------------------------|
| 11:00-11:05 | Opening Remarks | | 中華民國營養師公會 全國聯合會 金美雲 理事長 |
| 11:05-11:35 | The Value and Cost-effectiveness of Salt Reduction Program | 台大醫院營養室主任 陳珮蓉 主任 | |
| 11:35-12:05 | Gut Microbiota in Cardiovascular Health and Disease | 蔡一賢 理事 | |
| 12:05-12:35 | Vegetarian Diet and Cardiometabolic Health | 台灣素食營養學會 邱雪婷 秘書長 | |
| 12:35-12:45 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE

姓名：陳珮蓉 營養師

現職：

台大醫院營養室主任
台北市營養師公會理事長
中華民國營養師公會全國聯合會理事
台灣在宅醫療學會監事
財團法人腎臟病防治基金會董事
台灣膳食營養學雜誌顧問與編輯委員
台北醫學大學保健營養學系兼任助理教授

學歷：

輔仁大學食品營養研究所博士
輔仁大學食品營養研究所碩士
台北醫學院保健營養學系學士

經歷：

臺北市立聯合醫院營養部主任
台灣膳食營養學雜誌創刊總編輯

專業資格：

糖尿病衛教學會糖尿病衛教師

學會：

台灣營養學會
中華民國糖尿病衛教學會
中華民國血脂及動脈硬化學會
台灣動脈硬化暨血管病醫學會
台灣醫用營養醫學會
台灣社區醫療整合照護學會



The Value and Cost-Effectiveness of Salt Reduction Program

減鹽計畫的成本效益與健康照護的價值

陳珮蓉

所謂上醫，治未病，即預防醫學的概念，在現今非傳染性，慢性疾病為主要致死因的時代，改變生活型態以促進健康，避免罹病導致生活品質的下降，至為重要。最新的研究發現，即使是個人相關心臟病的基因較差，但良好的生活型態組別仍相對有較低的發病率。良好的生活型態包括：目前沒抽菸、不胖、每週至少運動一次及多吃蔬果與全穀類並少吃加工肉品、加糖飲料及鹽等。這些飲食生活型態的調整對大多數人而言都屬於低成本且日常生活即可執行。好的飲食生活即是最佳良方，生活型態醫學 (lifestyle medicine) 已經被建議列入醫學教育；雖然醫療技術進步快速、新藥推陳出新、健康食品琳瑯滿目，但是，建立良好的飲食生活習慣，是首要的營養照顧的價值，這不僅符合實證醫學，同時能夠依據個人需求且符合成本效益，是最佳保健策略。研究顯示，不健康的飲食增加心血管疾病死亡的風險，其中包括每日鈉攝取超過 2000 毫克。世界衛生組織 WHO (World Health Organization), 於 2014 年宣示於 2025 年前降低鈉鹽攝取量 30% 達每日攝取 5 公克 (=2000 毫克鈉) 的健康飲食目標。在推行公共衛生政策時，有關健康飲食促進計畫是否符合成本效益之議題也開始受到關注。美國研究生生活行為介入對降低肥胖者三高等心血管疾病危險因子並對照降低有品質生存年之成本 (cost/quality-adjusted life-year, QALY)，顯示健康飲食不僅具有實證醫學，而且符合成本效益。本土研究方面，分析國人營養調查與健保資料庫亦發現，多樣性均衡飲食行為老年人之食材花費較高；多樣性均衡飲食行為老年人使用健保住院醫療之花費較低，但是健康飲食行為成本與降低醫療支出兩者相比如何，相關分析因素複雜，有待更多的研究以探討其成本效益。有關減鹽政策的成本效益研究，針對全球 183 個減鹽計畫發現以降低因心血管疾病產生的殘障年 (disability adjusted life years, DALYs) 花費成本與標準閾值 (即 $<3.0 \times$ gross domestic product, GDP per capita) 比較，99.6% 的國家皆在 $<1.0 \times$ GDP per capita 範圍，高度符合成本效益。國人鈉鹽攝取依歷年之營養調查結果皆大於健康攝取量，然未見較積極有計畫性的減鹽政策。針對台北市對鈉鹽攝取之相關研究顯示，民眾對減鹽健康識能不足，期待能參考其他國家作為，積極推動減鹽等健康飲食計畫；同時也可進行成本效益分析相關研究以支持公共衛生政策，強化預防醫學，促進國民健康。

CURRICULUM VITAE

姓名：蔡一賢

服務單位：

馬偕紀念醫院營養醫學中心營養課營養師 / 課長

學歷：

台北醫學大學保健營養系碩士

經歷：

82/06-93/06 馬偕紀念醫院台北院區營養課營養師、組長、副課長、課長
93/07-101/07 馬偕紀念醫院淡水院區營養課課長
101/08- 迄今 馬偕紀念醫院營養醫學中心營養課課長
102- 迄今 中華民國營養師公會全國聯合會第七屆及第八屆常務理事
104- 迄今 台灣營養學會理事

符合資格：

講師證書 (講字第 105243 號)

教學醫院專任營養師 24 年且為臨床教師



Gut Microbiota in Cardiovascular Health and Disease

蔡一賢

近年來的研究多集中在腸道微生物群 - 宿主相互作用，因為愈來愈多證據顯示腸道微生物群在人體健康和疾病方面發揮重要作用，其中包括心血管疾病。與疾病相關的腸道微生物組成的變化，簡稱為腸內菌叢生態失調，此與動脈粥樣硬化、高血壓、心臟衰竭、慢性腎臟病、肥胖和第2型糖尿病等病理學有關。除了腸道微生物組成的變化外，腸道微生物群的代謝潛力已經被確定為發展疾病的一個促成因素。

微生物群體通過許多途徑與宿主相互作用，包括三甲胺 / 三甲胺 N- 氧化物途徑，短鏈脂肪酸途徑以及一級和二級膽汁酸途徑。除了這些代謝依賴性途徑，代謝依賴性過程被認為對心血管疾病的發病機制也有潛在的影響。例如，與心臟衰竭相關的循環，腸水腫和腸障壁功能受損等被認為與細菌轉移與細菌代謝產物增加的發炎狀態有關。

以下為本課程提供之重點介紹：

1. 了解體內腸道菌叢生態對宿主生理之影響。
2. 了解腸道菌叢及其代謝產物對慢性發炎與心臟代謝相關疾病的可能機制。
3. 了解飲食組成對腸道菌叢及其代謝產物的影響。
4. 了解飲食組成及腸道菌叢對心臟代謝相關疾病的可能益處。

CURRICULUM VITAE

NAME: Tina H. T. Chiu (邱雪婷)

E-mail: tina925@gmail.com



AFFILIATIONS:

Dietitian, Tzu Chi Medical Foundation, Taiwan

Adjunct Lecturer, College of Medicine, Tzu Chi University, Taiwan

Secretary General, Taiwan Vegetarian Nutrition Society, Taiwan

EDUCATION/PROFESSIONAL LICENSURE:

2017 PhD, Epidemiology, National Taiwan University, Taiwan

2008 MPH, School of Public Health, Loma Linda University, USA

2001 BSc (Dietetics), University of British Columbia, Canada

Registered dietitian in both Taiwan and USA

RESEARCH INTERESTS/PUBLICATIONS:

Area of expertise / Research interests:

Vegetarian nutrition

Nutritional epidemiology

Health impact of vegetarian diets

Role of plant foods in environmental sustainability and biodiversity



Vegetarian Diet and Cardiometabolic Health

Tina H. T. Chiu

Vegetarian diets have been shown to lower the risk of cardiovascular diseases, hypertension, and diabetes in prospective cohort studies. Vegetarian dietary intervention had been shown to reverse stenosis in CVD patients, lower many cardiovascular risk factors, improve glucose control, and reduce body weight and blood pressures. Its cholesterol lowering effect is most likely due to lower saturated fat, higher soluble fiber and other plant functional components. The portfolio diet, a complete plant based diet with cholesterol lowering food items have been shown to be more effective than step 2 diet, and comparable to first generation statin plus step 2 diet. Vegetarian diets may additionally benefit cardiovascular health through gut microbiota alteration that result in lower trimethylamine N-oxide. Potential insufficiency in vitamin B12, omega-3 fatty acids, vitamin D may be a concern when vegetarian diet is not balanced but these could be easily corrected by incorporating the right foods and supplements. This talk will update the current understanding on effect of vegetarian diet on cardiometabolic risk factors and disease outcome, while providing some guidance on planning a healthy vegetarian diet for optimal cardiometabolic protection.



MEMO

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Lunch Symposium

地點：財團法人張榮發基金會八樓 802

日期：106 年 9 月 24 日 12:45~13:50

| Time | Topic | Speaker | Moderator |
|-------------|---|----------------|-----------|
| 12:45-12:50 | Opening Remarks | | 蘇正煌 主任 |
| 12:50-13:30 | PCSK9 Inhibitors - From Lowering LDL-C to Reducing CV Events | 國泰醫院 黃啓宏 醫師 | |
| 13:30-13:50 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE

NAME: Chi-Hung Huang M.D., FSCAI, FAPSC

EDUCATION:

1994 M.D. Degree, China Medical College, Taichung, Taiwan

CURRENT POSITION:

July 2000-present Attending physician, Section of Cardiology, Internal Medicine,
Cathay General Hospital

Jan 2010-present Chief of MICU

TRAINING:

July 1993-June 1994 Internship, Cathay General Hospital (CGH)

July 1994- June 1998 Residency in Internal Medicine, CGH

July 1998-June 1999 Chief Residency in Internal Medicine, CGH

July 1999-June 2000 Fellowship in Cardiology, CGH

Aug 2002 Short-term fellow in Department of Cardiology, Hospital De
Weezenlanden, Zwolle, The Netherlands

2002- 2003 Clinical Fellow in Unité de Cardiologie Interventionelle, Clinique
Pasteur, Toulouse, France

LICENSURE:

Practice physician in Taiwan (26093)

Specialist of Internal Medicine(5070)

Specialist of Cardiology (S857)

Specialist of Critical Care Medicine (SC0986)



PCSK9 Inhibitors - From Lowering LDL-C to Reducing CV Events

黃啟宏

Hyperlipidemia is a medical condition characterized by an increase in one or more of the plasma lipids, including triglycerides, cholesterol, cholesterol esters, phospholipids and or plasma lipoproteins including very low-density lipoprotein and low-density lipoprotein along with reduced high-density lipoprotein levels. Cardiovascular disease is the leading cause of morbidity and mortality globally. The underlying pathology of cardiovascular disease is atherosclerosis, which develops over many years and is usually advanced by the time symptoms occur. Recently, several multi-center randomized clinical trials and genetic studies built up a strong scientific foundation of lowering cholesterol to improve atherosclerosis and further reduce cardiovascular events. This year results from the FOURIER trial, the first PCSK9i outcomes study, showed the addition of evolocumab, a PCSK9 inhibitor, to statin therapy over several years significantly reduced cardiovascular morbidity in patients with clinically evident atherosclerotic cardiovascular disease. The primary endpoint – a composite of heart attack, stroke, hospitalization for angina, revascularization or cardiovascular death – translating to a 15% reduction in risk. Further narrowing down on the scope of secondary end-points, defined as hard MACE end-points, treatment with evolocumab reduced cardiovascular risk by 20%. There was no effect on cardiovascular mortality by itself, but there was a statistically significant 27% reduction in heart attack and a 21% reduction in stroke. The talk will make an overview of these recent studies and its sub-analysis published recently.

Joint Symposium of TSLA and TALE

地點：財團法人張榮發基金會八樓 801

日期：106 年 9 月 24 日 14:00~16:20

| Time | Topic | Speaker | Moderator |
|-------------|---|----------|-----------|
| 14:00-14:10 | Opening Remarks | | 葉宏一 理事長 |
| 14:10-14:30 | Current Status of Lipid Control in Taiwan: What Do We Learn from T-SPARCLE and T-PPARCLE Registry Studies | 吳造中 名譽理事 | |
| 14:30-14:40 | Discussion | | 陳肇文 名譽理事 |
| 14:40-15:00 | What are the Residual Risks in DM Patients after Lipid-lowering Therapy and How to Manage It? | 吳卓錡 醫師 | |
| 15:00-15:10 | Discussion | | 陳茂元 教授 |
| 15:10-15:30 | What are the Residual Risks in CKD Patients after Lipid-lowering Therapy? | 賀立婷 醫師 | |
| 15:30-15:40 | Discussion | | 陳文鍾 理事長 |
| 15:40-16:00 | Who, When, and How to Use PCSK9 Inhibitors? | 李貽恆 秘書長 | |
| 15:00-16:10 | Discussion | | |
| 16:10-16:20 | Panel Discussion & Closing Remarks | | |

CURRICULUM VITAE



NAME: Chau-Chung Wu, M.D., Ph.D.

EDUCATION:

- 1978-1985 M.D., College of Medicine, National Taiwan University, Taipei, Taiwan
- 1991-1995 Ph.D. (Clinical Medicine), College of Medicine, National Taiwan University, Taipei, Taiwan
- 1995-1996 Visiting Research Associate in Biomedical Engineering, Johns Hopkins University, Baltimore, USA

PROFESSIONAL SPECIALTY:

Cardiology, Vascular and cellular biology, Dyslipidemia, Cardiovascular image, Biomagnetism, Nanotechnology

HOSPITAL APPOINTMENTS:

- 1984-1985 Intern (Medicine), National Taiwan University Hospital, Taipei, Taiwan
- 1987-1992 Resident (Internal Medicine), National Taiwan University Hospital, Taipei, Taiwan
- 1990-1992 Research Fellow in Cardiology, National Taiwan University Hospital, Taipei, Taiwan
- 1992-1994, 2-1995, 2 Staff Cardiologist, National Taiwan University Hospital, Taipei, Taiwan
- 1997, 8-2001, 7 Director, Coronary Care Unit, National Taiwan University Hospital, Taipei, Taiwan
- 2001, 8-2003, 7 Director, Echocardiographic Lab. National Taiwan University Hospital, Taipei, Taiwan
- 2002, 8-2005, 6 Director, Cardiovascular Functional Lab. National Taiwan University Hospital-Kong-Kuan, Taipei, Taiwan
- 2002, 8-2005, 6 Vice-Chairman, Department of General Medicine, National Taiwan University Hospital-Kong-Kuan, Taipei, Taiwan
- 2005, 7-2007, 6 Chairman, Department of Internal Medicine, E-Da Hospital/I-Shou University, Kaohsiung, Taiwan
- 2007, 9-2009, 8 Director, Intensive Care Unit, National Taiwan University Hospital-Kong-Kuan, Taipei, Taiwan

ACADEMIC APPOINTMENTS:

- 1990-1992 Research Fellow in Cardiology, National Taiwan University Hospital, Taipei, Taiwan
- 1993-1997 Lecturer in Medicine, National Taiwan University, Taipei, Taiwan
- 1995-1996 Visiting Research Associate in Biomedical Engineering, Johns Hopkins University
- 1998-2003 Assistant Professor in Primary Care Medicine and Internal Medicine, National Taiwan University, Taipei, Taiwan
- 2003-2009 Associate Professor in Primary Care Medicine and Internal Medicine, National Taiwan University, Taipei, Taiwan
- 2009-2014 Professor in Primary Care Medicine and Internal Medicine, National Taiwan University, Taipei, Taiwan
- 2014- Professor in Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan
- Professor in Department of Medical Education & Bioethics, and Department of Graduate Institute of Medical Education & Bioethics, National Taiwan University College of Medicine



Current Status of Lipid Control in Taiwan: What Do We Learn from T-SPARCLE and T-PPARCLE Registry Studies

Chau-Chung Wu, M.D., Ph.D.

CURRICULUM VITAE

姓名：吳卓鏞



What are the Residual Risks in DM Patients after Lipid-lowering Therapy and How to Manage It?

吳卓鏞

CURRICULUM VITAE



NAME: Li-Ting, Ho

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EDUCATION AND TRAINING:

2001-2007 National Cheng Kung University Medical College

2007-2010 National Taiwan University Hospital, Department of Internal Medicine,
Resident

2010-2012 National Taiwan University Hospital, Cardiovascular Division, Fellowship

2012- National Taiwan University Hospital, Department of Internal Medicine,
Attending physician

2015- Institute of Epidemiology and Preventive Medicine, National Taiwan
University

LICENSING:

2007 Board of physician

2010 Board of internal medicine

2012 Board of cardiology

2013 Board of critical care medicine

2015 Board of cardiac electrophysiology and interventions

CLINICAL SPECIALTY:

General cardiology, cardiac arrhythmia, cardiac critical care medicine, device implantation,
simple and complex arrhythmia ablation



What are the Residual Risks in CKD Patients after Lipid-lowering Therapy?

Li-Ting, Ho

The Taiwanese Secondary Prevention for patients with AtheRosCLerotic disease (T-SPARCLE) Registry was a multi-center observational registry, from 14 teaching hospitals in Taiwan. This registry-type prospective observational study recruits and follows up a large population of patients with CV diseases in Taiwan who have been receiving secondary prevention therapies. The primary outcome of this trial is the time of first occurrence of a major adverse cardiac events (MACE), included cardiovascular death, hospitalization for nonfatal MI or stroke, or cardiac arrest with resuscitation in patients receiving secondary prevention therapy over the following periods.

Most statin clinical trials were not designed to include patients with chronic kidney disease (CKD), and most evidences of the statins use in CKD patients were from the post-hoc subgroup analyses. Therefore, the aim of this registry is to determine the relationship between the on-treatment lipid profiles and the cardiovascular (CV) events in all kinds of patients, including the CKD and non-CKD population.

From June, 2008 to September, 2014, 5388 patients were included in the analysis and 1478 (27.4%) had CKD without dialysis. CKD patients had higher TG and lower LDL-C levels. The incidence rates of recurrent MACEs per 1000 person-years were in CKD patients was 19.5 (95% CI 15.5-24.9), compared with 9.1 (95% CI 7.4-11.1) in non-CKD patients. Sixty-eight percent of patients received statin therapy as guideline suggestion. In patients with statin therapy, there were no differences in MACE risk between each level of on-treatment LDL-C, TG and HDL-C level (<40mg/dL or >50mg/dL). Higher on-treatment non-HDL-C level was associated a higher risk in patients both with or without CKD. Lower body mass index (BMI <23 kg/m²) was associated with higher MACE risk in CKD patients rather than non-CKD patients.

Our study showed that on-treatment LDL-C was not a good CV outcome predictor. Instead, on-treatment non-HDL-C was a strong predictor of recurrent CV events in the patient without CKD. Lower BMI (<23 kg/m²) was associated with higher recurrent MACE risk in CKD patients with statin treatment.

CURRICULUM VITAE

姓名：李貽恆醫師

現職：

國立成功大學醫學院附設醫院心臟內科主任及主治醫師

國立成功大學醫學院內科學科教授

學歷：

09/1981-06/1988 高雄醫學大學醫學系醫學士

09/1996-06/2000 國立成功大學醫學院基礎醫學研究所博士

經歷：

09/1990-08/1995 國立台灣大學醫學院附設醫院內科部住院醫師

08/1995-08/1996 國立成功大學醫學院附設醫院內科部主治醫師

08/1996-08/2000 國立成功大學醫學系內科學科講師

08/2000-08/2008 國立成功大學醫學系內科學科副教授

08/2008-迄今 國立成功大學醫學系內科學科教授

中華民國心臟學會副秘書長

中華民國血脂及動脈硬化學會理事

研究主題：

動脈硬化的病態生理學

高血壓、高脂血症、冠狀動脈心臟病的分子遺傳研究

血管生物學

研究成果：

已發表100多篇研究論文於國際SCI醫學期刊，包括*Journal of the American College of Cardiology*, *European Heart Journal*, *Cardiovascular Research*, *Chest*, *American Journal of Cardiology*, *Thrombosis and Haemostasis*等



Who, When, and How to Use PCSK9 Inhibitors?

李貽恆

心血管疾病防治網 繼續教育課程

地點：財團法人張榮發基金會八樓 803

日期：106 年 9 月 24 日 08:20~16:30

| 時 間 | 內 容 規 劃 | 講 師 (服 務 醫 院 及 職 稱) |
|-------------|--|-------------------------------|
| 08:20~08:30 | Opening Remarks | 葉宏一 理事長 |
| 08:30~09:20 | New Development of Hypertension Treatment in 2017 | 吳懿哲 馬偕醫學院 醫學系 副教授兼系主任 |
| 09:20~10:10 | New Development of Dyslipidemia Treatment in 2017 | 李貽恆 成大醫院心臟血管科 教授 |
| 10:10~10:20 | Break | |
| 10:20~11:10 | What is the Recommended Healthy Lifestyle for My Cardiovascular Disease Patients | 祝年豐 理事 |
| 11:10~12:00 | New Development of Acute Coronary Syndrome Treatment in 2017 | 黃金洲 臺北榮民總醫院教學部、內科部心臟科 主治醫師 |
| 12:00~13:00 | Lunch | |
| 13:00~13:50 | New Development of Stroke Prevention for Atrial Fibrillation in 2017 | 趙庭興 成大醫院心臟血管科 教授 |
| 13:50~14:40 | New Development of Peripheral Artery Disease Treatment In 2017 | 劉俊傑 馬偕紀念醫院心臟內科 主治醫師 |
| 14:40~14:50 | Break | |
| 14:50~15:40 | New Development of Diabetes Treatment In 2017 | 王治元 臺大醫院內科部 主治醫師 |
| 15:40~16:30 | New Development of Acute Stroke Treatment In 2017 | 周兆亮 馬偕紀念醫院一般神經內科 主治醫師 |
| 16:30~ | Closing Remarks | |

CURRICULUM VITAE

姓名：吳懿哲醫師

職稱：

馬偕醫學院 醫學系副教授兼副系主任
馬偕醫學院 生物醫學研究所合聘副教授
馬偕紀念醫院 醫學教育部副主任
馬偕紀念醫院 心臟內科資深主治醫師

學歷：

1985-1992 中國醫藥大學中醫學系醫學士
1992-1994 國立陽明大學醫學院傳統醫藥學所碩士
2003-2006 英國布里斯托大學心臟學研究所 (Bristol Heart Institute, University of Bristol, UK) 分子生物學博士

臨床經歷：

1994-1995 台北市立陽明醫院內科住院醫師
1995-1997 馬偕紀念醫院內科住院醫師
1997-1999 馬偕紀念醫院心臟內科總醫師
1999-2005 馬偕紀念醫院心臟內科主治醫師
1999-2003 馬偕紀念醫院心臟內科暨加護病房專責主治醫師 ()
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學術經歷：

2000-2002 馬偕醫護管理專校兼任講師
2002-2003 馬偕醫護管理專校兼任助理教授
2007-2012 國立陽明大學醫學院傳統醫藥學所兼任助理教授
2009-2011 馬偕醫學院醫學系專任助理教授
2011- 迄今 馬偕醫學院醫學系專任副教授

榮譽：

2006 英國心臟學會青年研究者獎
(Young Research Worker Prize, British Cardiac Society)
1998、2000、2009 馬偕紀念醫院優良員工
2007、2008 馬偕紀念醫院優良教師
2010-2011 馬偕紀念醫院通識教育優良講師
2012 中華民國血脂及動脈硬化學會海報論文獎第一名
2013 馬偕醫學院優良教師

臨床專長：

肺動脈高壓、心衰竭、高血壓、缺血性心臟病、冠狀動脈介入手術、心律不整等。

學術著作：

包括發表於 Circ Res, ATVB, Cardiovasc Res, Am J Cardiol, J Vasc Surg, …等五十餘篇著作。



New Development of Hypertension Treatment in 2017

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學歷：

09/1981-06/1988 高雄醫學大學醫學系醫學士

09/1996-06/2000 國立成功大學醫學院基礎醫學研究所博士

經歷：

09/1990-08/1995 國立台灣大學醫學院附設醫院內科部住院醫師

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中華民國心臟學會副秘書長

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研究主題：

動脈硬化的病態生理學

高血壓、高脂血症、冠狀動脈心臟病的分子遺傳研究

血管生物學

研究成果：

已發表100多篇研究論文於國際SCI醫學期刊，包括*Journal of the American College of Cardiology*, *European Heart Journal*, *Cardiovascular Research*, *Chest*, *American Journal of Cardiology*, *Thrombosis and Haemostasis*等



New Development of Dyslipidemia Treatment in 2017

李貽恆



CURRICULUM VITAE

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What is the Recommended Healthy Lifestyle for My Cardiovascular Disease Patients

祝年豐



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中華民國心臟學會第 25 屆副秘書長
台灣醫學教育學會副秘書長
高級心臟救命術指導員
中華民國心臟學會專科指導醫師

學歷：

國立陽明大學醫學系醫學士
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經歷：

台北榮民總醫院內科部心臟內科總醫師
台北榮民總醫院內科部住院醫師
德國柏林心臟醫學中心 (German Heart Institute Berlin)

專科證書：

中華民國內科專科醫師、中華民國心臟專科醫師、中華民國重症專科醫師、心臟血管介入專科醫師、心臟超音波專業醫師

榮譽：

中華民國心臟學會優秀論文獎第三名 (2010)
APSH Fellowships award (2010), Vancouver hypertension 2010 and Asian-Pacific Society of Hypertension.
中華民國心臟學會青年醫師研究獎第二名 (2014)
醫策會第 16 屆醫療品質獎擬真情境類急重症照護新人組「潛力獎」(王則堯、胡瑋、鄒瑜汝、沈瑞玲、黃金洲)(2015)
104 學年度國立陽明大學醫學系優良教師琉璃獎座
105 年度「台灣醫學教育學會研究獎」(2016)



New Development of Acute Coronary Syndrome Treatment in 2017

黃金洲

急性冠心症 (acute coronary syndrome) 是臨床上常遇到的病症，需要儘速跟其他造成急性胸痛的原因做鑑別診斷，包含：心血管疾病、胸腔疾病、腸胃道疾病及神經系統疾病等等。急性冠心症的死亡率高，隨時可能會發生致命性心律不整或甚至心臟停止，也容易造成病患日後演變成心臟衰竭。致病機轉為冠狀動脈上的粥狀硬塊病變突然破裂，引發局部血栓形成，造成心臟肌肉的缺氧或甚至壞死。形成的血栓可以完全或不完全阻斷冠狀動脈血流而導致心肌細胞缺氧甚至於壞死。越早將血栓溶解，儘早恢復冠狀動脈正常血流可以改善病患之預後。

關於急性冠心症的診斷，需由病患臨床症狀、心電圖及心臟酵素來判斷。關於心電圖的部分，近年來強調對急性胸痛疑似病患在到院前進行 12 導程心電圖 (prehospital 12-lead ECG)，藉由第一線人員或電腦判讀或傳到有心導管室的醫院，以能早期啟動緊急心導管手術；若無法取得到院前 12 導程心電圖，也盡量能在到院 10 分鐘內取得 12 導程心電圖並進行判讀。在心臟酵素的部分，近年來也開始利用 high-sensitivity troponin T 和 high-sensitivity troponin I 配合病患風險評估已將強對急性冠心症的診斷。依據病患的 12 導程心電圖和血液的心肌酵素可分為 ST 段上升急性冠心症 (STE-ACS) 或非 ST 段上升急性冠心症 (NSTEMI-ACS)，或可以進一步分成 ST 段上升心肌梗塞 (STEMI)、非 ST 段上升心肌梗塞 (NSTEMI) 及不穩定心絞痛 (unstable angina)。

關於急性冠心症的治療，首先要早期分辨出 ST 段上升急性冠心症的病患，盡快給予緊急的再灌注治療，包括：注射血栓溶解劑或緊急心導管手術。目前若病患可以轉送到有心導管室的醫院則優先以緊急心導管手術。若無法及時轉送到有心導管室的醫院，才考慮注射血栓溶解劑，但之後仍要轉送到有心導管室的醫院在最初的 3-6 小時或最多在 24 小時內接受例行的心導管檢查。對於非 ST 段上升急性冠心症的病患，若符合高危險的情況也建議早期的心導管手術。在藥物的部分，若無特殊的禁忌症，建議 EMS 人員可以指導到院前之疑似急性冠心症病人先行服用 Aspirin，進入醫院後還可能會給予的藥物治療，包括：加上 clopidogrel or prasugrel or ticagrelor 的雙血小板藥物治療 (Dual antiplatelet therapy, DAPT)、抗凝血藥物 (肝素 heparin 或低分子量肝素 LMWH)、其他抗血小板藥物 (靜脈注射 glycoprotein IIb/IIIa 接受體阻斷劑)、血管張力素轉換酵素抑制劑 (ACE inhibitor) 或血管收縮素抑制劑 (ARB)、降膽固醇藥物 (Statin 類藥物)、抗心肌缺氧藥物 (乙型阻斷劑 beta blocker、硝酸鹽類 nitrate 及鈣離子阻斷劑 calcium channel blocker) 等等。

關於急性冠心症的診斷和治療，今年歐洲心臟學會針對 ST 段上升急性冠心症和雙血小板藥物治療有最新的建議指引，在此將進行完整的回顧。



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國立成功大學醫學院內科部定教授兼附設醫院心血管內科主治醫師。

國立成功大學醫學院附設醫院主任秘書。

台灣介入性心臟血管醫學會第五屆及第六屆理事。

台灣高血壓學會第六屆理事。

台灣介入性心臟血管醫學會第六屆教育委員會副召集人。

中華民國血脂及動脈硬化學會副祕書長。

經歷：

國立成功大學醫學院附設醫院品質中心副主任。

國立成功大學醫學院附設醫院斗六分院副院長兼品管中心主任。

國立成功大學醫學院附設醫院斗六分院醫務秘書兼內科部主任。

中華民國心臟學會第二十二屆副祕書長。

第二十二屆雲林縣醫師公會理事。

國立成功大學醫學院內科學科部定副教授、助理教授及講師。

學歷：

台北醫學大學醫學士；民國八十年六月畢。

榮譽及受獎：

79年度林口長庚紀念醫院年度最佳實習醫師。

83年度國立成功大學醫學院附設醫院內科最佳教學住院醫師。

第30、31屆及第38屆中華民國心臟醫學會年會最佳海報獎。

93、105年國立成功大學醫學中心內科部主治醫師最佳研究獎。

94年度國立成功大學醫學院最佳教學主治醫師。

95及96年度國立成功大學醫學中心內科部主治醫師教學獎。

FACC、FESC及FAPSC。

97、99及100年國立成功大學醫學中心醫療科技研究計劃成果海報獎。

2010、2015台灣心臟學會(TSOC)高血壓治療指引編撰委員。

2011年馬奎斯世界名人錄及亞洲名人錄登錄列名。

2013年美國心臟學院(ACC)年會最佳海報論文獎。

2014年台灣內科醫學會最佳海報論文獎。

2016年中華民國血脂及動脈硬化學會血脂治療指引編撰委員。

專長：

心導管介入治療、高血壓、動脈硬化基因學、血管新生、幹細胞研究。



New Development of Stroke Prevention for Atrial Fibrillation in 2017

Ting-Hsing Chao (趙庭興), MD, FACC, FESC, FAPSC

Professor of Internal Medicine

National Cheng Kung University College of Medicine and Hospital

Atrial fibrillation (AF) is the most common sustained arrhythmia. Both the incidence and prevalence of AF are increasing, and the burden of AF is becoming huge. Many innovative advances have emerged in the past decade for the diagnosis and management of AF, including a new scoring system for the prediction of stroke and bleeding events, the introduction of non-vitamin K antagonist oral anticoagulants and their special benefits in Asians, new rhythm- and rate-control concepts, optimal endpoints of rate control, upstream therapy, life-style modification to prevent AF recurrence, and new ablation techniques. The Taiwan Heart Rhythm Society and the Taiwan Society of Cardiology published the 2016 Guidelines of the Taiwan Heart Rhythm Society and the Taiwan Society of Cardiology for the Management of Atrial Fibrillation recently. This guideline presents the details of the updated recommendations, along with their background and rationale, focusing on data unique for Asians. The aforementioned issues will be discussed in today's presentation.

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New Development of Peripheral Artery Disease Treatment in 2017

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CURRICULUM VITAE

NAME: Chih-Yuan, Wang

EDUCATION:

1982-1989 M.D. Chung-Shan Medical University, Taiwan
1999-2003 Ph.D. National Taiwan University, Taiwan (Physiology)
2005-2007 MBA, Graduate Institute of Business Administration, National Taiwan University

POSTGRADUATE TRAINING:

Residencies:

Department of Internal Medicine, National Taiwan University Hospital

Fellowship:

Division of Endocrine and Metabolism, National Taiwan University Hospital

ATTENDING & ADMINISTRATION:

1995-1997 Department of Internal Medicine, National Taiwan University Hospital
1996-2010 Department of Internal Medicine, National Taiwan University Hospital, Taiwan
(Adjunct staff)
2001-2010 Chief of Endocrine and Metabolism, Far-Eastern Memorial Hospital (FEMH)
2006-2010 Chief of Department of Internal Medicine, FEMH
2007-2008 Chief of Center of Faculty Development (CFD), FEMH
2008-2010 Chief, Clinical Trial Center (CTC), FEMH

CURRENT POSITION:

Since 2010/07/29-present Attending, Department of Internal Medicine, National Taiwan University Hospital, No. 7, Chung-Shan South Road, Taipei, Taiwan 100, R.O.C

ACADEMIC POSITION:

Associate professor, Department of Internal Medicine, College of Medicine, National Taiwan University, Taiwan

SPECIALTY:

1993- Specialty, Taiwan Society of Internal Medicine, Taiwan
1995- Specialist, Endocrinology and Metabolism, The Endocrinology Society and Diabetes Association of the Republic of China
2005- Certified Diabetes Educator, Taiwan Association of Diabetes Education, Taiwan

EXPERIENCES:

1995-1998 Secretary General, The Endocrinology Society of the Republic of China
2005-present Education Committee, The Society of Ultrasound in Medicine, Taiwan
2007-present Board of Directors, Endocrine Society, Taiwan
2008-present Editor, Journal of Medical Ultrasound (West Pacific)
2010-present Board of Directors, Taiwan Association of Diabetic Educator, Taiwan
2012-present Executive editor, Journal of Internal Medicine of Taiwan, Taiwan
2014-present Secretary General, Taiwan Association of Diabetic Educator, Taiwan



New Development of Diabetes Treatment in 2017

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New Development of Acute Stroke Treatment in 2017

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