



中山醫學大學生醫系傑出系友選拔推薦表(附件)

推薦類別： 學術類 服務類 母系貢獻類 特殊類 填表日期：民國111年7月12日

被 推 薦 人	姓名	鄭宇哲	性別	男	
	英文姓名	Yu-Che Cheng	生日	8/1	
	畢業科系	生物醫學科學系88級			
	最高學歷	博士			
	經歷	學士-私立中山醫學大學生命科學系 1999-2003 碩士-私立中山醫學大學口腔醫學研究所 2004-2006 博士-國立國防大學生命科學研究所 2006-2013 博士後-中央研究院生物醫學科學所(謝小燕研究員) 2013-迄今			
	現職	中央研究院生物醫學科學所獨立研究學者			
	地址	台中市石岡區和盛里和盛街32號	聯絡電話	0919043877 (02)2789-9056	
傑出事蹟	曾獲第23屆王民寧獎之優秀論文獎 曾任三年科技部研究學者專題研究計畫之計畫主持人，計畫編號為108-2321-B-001-018-MY3				
推薦單位	名稱	負責人簽名		通訊處及聯絡電話	
	中山醫學大學生物醫學科學系謝家慶				
遴選委員會 審查意見					

附註：1.「傑出事蹟」請以條列式詳舉具體事蹟，切勿繁文敘述。

2.請於規定期限內，逕寄40201台中市南區建國北路一段110號 生物醫學科學學系。

3.若以本系傑出系友選拔辦法第五條第四款方式推薦者，請書寫推薦人簽名表。

4.本表若不敷使用，請自行影印。

Curriculum Vitae

➤ Basic Information

Name: Yu-Che Cheng

Gender: Male

Age: 41

Nationality: Taiwan

Current position:

Postdoctoral fellow

Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan

Tel: 0919043877

E-mail: superpandaking@hotmail.com



Education:

B.S. - 1999, Department of Biomedical Sciences, Chung Shan Medical University, Taichung, Taiwan

M.S. - 2004, College of Oral Medicine, Chung Shan Medical University, Taichung, Taiwan

Ph.D. - 2006, Graduate Institute of Life Sciences, National Defense Medical Center, Taipei, Taiwan

➤ Professional experience

Research:

- *Undergraduate Research* - Department of Biomedical Sciences, Chung Shan Medical University, Taichung, Taiwan, 2000-2003. The research performed in Dr. Shuan-Yow Li's laboratory focused on mutation and regulation of *GJB2* and *GJB3* in patients with nonsyndromic hearing loss.
- *Research Assistant* - Department of Biomedical Sciences, Chung Shan Medical University, Taichung, Taiwan, 2003-2004. The research performed in Dr. Jia-Ching Shieh's laboratory involved regulation by tailor-made zinc-finger transcription factors using yeast *Saccharomyces cerevisiae* as a model system.
- *M.S.* - College of Oral Medicine, Chung Shan Medical University, Taichung, Taiwan, 2004-2006. My thesis project in Dr. Jia-Ching Shieh's laboratory was identification and functional characterization of *Candida albicans* CDC4.
- *Ph.D.* - Graduate Institute of Life Sciences, National Defense Medical Center, Taipei, Taiwan, 2006-2013. My thesis project in Dr. Sheau-Yann Shieh's laboratory focused on the functions and regulation of candidate tumor suppressor *BTG3* in maintenance of genome stability.
- *Post-doctoral training* - Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, 2013-present. A post-doctoral position was offered by my thesis

adviser, Dr. Sheau-Yann Shieh to expand my thesis project. My current research focuses on a role of the potential deubiquitination enzyme (USP3) in BTG3/CHK1 mediated cell survival and genome stability maintenance. In addition, I also generated Btg3 conventional and conditional knockout mice to further study the function of BTG3 in tumor suppression. Based on those mice, I identified the roles and regulation of BTG3 in adipocyte differentiation and skin cancer development.

Awards and honors:

1. Ph.D. Student research poster award, The 12th Postgraduate thesis conference, National Defense Medical Center, Taipei, Taiwan, May 25, 2012.
2. The 23rd Wang Ming-Ning Award for outstanding PhD thesis in domestic medical research, 2013.

Program

Ministry of Science and Technology

Program host

MOST 108-2321-B-001-018-MY3

Project Title : To investigate the role of BTG3 in nucleotide excision repair and skin cancer

Project Period : 108/8/1-111/7/30

Supervision of summer internship

- 1 · 2015 · TRIM17 promotes Cyclin D1 ubiquitination but not SUMOylation.
- 2 · 2018 · TRIM17 regulates EMT processes through SUMOylating snail1.

Summary of Skills

Molecular cell biology, Tumor Biology, Signal transduction, Protein modification, biotechnology

Publications:

1. Shieh JC, White A, **Cheng YC**, Rosamond J. Identification and functional characterization of Candida albicans CDC4. J Biomed Sci. 2005 Dec; 12(6):913-24.
2. Shieh JC, **Cheng YC**, Su MC, Moore M, Choo Y, Klug A. Tailor-made zinc-finger transcription factors activate FLO11 gene expression with phenotypic consequences in the yeast Saccharomyces cerevisiae. PLoS One. 2007 Aug 15;2(8):e746.

3. Lin TY, **Cheng YC**, Yang HC, Lin WC, Wang CC, Lai PL, Shieh SY. Loss of the candidate tumor suppressor BTG3 triggers acute cellular senescence via the ERK-JMJD3-p16(INK4a) signaling axis. *Oncogene*. 2012 Jul 5;31(27):3287-97.
4. **Cheng YC**, Lin TY, Shieh SY. Candidate tumor suppressor BTG3 maintains genomic stability by promoting Lys63-linked ubiquitination and activation of the checkpoint kinase CHK1. *Proc Natl Acad Sci U S A*. 2013 Apr 9;110(15):5993-8.
5. Yeh CW, Yu ZC, Chen PH, **Cheng YC**, Shieh SY. Phosphorylation at threonine 288 by cell cycle checkpoint kinase 2 (CHK2) controls human monopolar spindle 1 (Mps1) kinetochore localization. *J Biol Chem*. 2014 May 30;289(22):15319-27.
6. **Cheng YC**, Chen PH, Chiang HY, Suen CS, Hwang MJ, Lin TY, Yang HC, Lin WC, Lai PL, Shieh SY. Candidate tumor suppressor B-cell translocation gene 3 impedes neoplastic progression by suppression of AKT. *Cell Death Dis*. 2015 Jan 8;6:e1584.
7. Lai WC, Chang TW, Wu CH, Yang SY, Lee TL, Li WC, Chien T, **Cheng YC**, Shieh JC, Candida albicans Dbf4-dependent Cdc7 kinase plays a novel role in the inhibition of hyphal development. *Sci Rep*. 2016 Sep 20;6:33716.
8. **Cheng YC**, Shieh SY, Deubiquitinating enzyme USP3 controls CHK1 chromatin association and activation. *Proc Natl Acad Sci U S A*. 2018 May 22;115(21):5546-5551.
9. **Cheng YC**, Chiang HY, Cheng SJ, Chang HW, Li YJ, Shieh SY, Loss of the tumor suppressor BTG3 drives a pro-angiogenic tumor microenvironment through HIF-1 activation. *Cell Death Dis*. 2020 Dec 11;11(12):1046.
10. **Cheng YC**, Shieh SY, Determination of CHK1 Cellular Localization by Immunofluorescence Microscopy. *Methods Mol Biol*. 2021;2267:1-6.

Conference publications:

1. Shieh JC, **Cheng YC**#. Tailor-made transcription factors based on C₂H₂ zinc finger module are used as gene switches to direct the control of gene expression in yeast *Saccharomyces cerevisiae*. The 13th Symposium on Recent Advances in Cellular and Molecular Biology, Pingtung, Taiwan, 2005.
2. Shieh JC, **Cheng YC**#. Candida albican SCF^{CDC4} is a negative regulator of filamentous growth. The 21th Joint Annual Conference of Biomedical Science, Taipei, Taiwan, 2006.
3. **Cheng YC**#, Lin TY, Chiang HY, Chen PH, Shieh SY. BTG3 suppresses tumorigenesis by antagonizing the AKT–GSK3b–β-catenin signaling pathway. CSH-Asia/ICMS Joint Conference: Tumor Microenvironment, Suzhou, China, November 13-17, 2012.
4. **Cheng YC**#, Shieh SY. The deubiquitinase USP3 controls CHK1 cellular

localization and activation. The 15th Society of Chinese Bioscientists in America International Symposium, Academia Sinica, Taipei, Taiwan, June 26-29, 2015.

5. **Cheng YC#**, Shieh SY. The deubiquitinating enzyme USP3 controls CHK1 cellular localization and activation. Keystone Symposia Conference: Genomic Instability and DNA Repair Program, Santa Fe Community Convention Center, Santa Fe, New Mexico, USA, April 2-6, 2017.