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Current research topics (研究方向)

Generation and Induction of Immunotolegenic Dendritic cells

(免疫耐受性樹突細胞之轉化與誘導)

Molecular Mechanisms of Autoimmune Diseases

(自體免疫疾病分子機轉之探討)

Immune Tolerance

(免疫耐受性之研究)

Teaching Courses (教學科目)：

Immunology (免疫學)，Advanced Immunology (免疫學特論)，Biology (生物學)，Microbiology (微生物學)，Antigen Presenting Cells for Medical Applications (抗原呈現細胞於醫學上之應用)，Introduction to Medicine （基礎醫學導論），Scientific German（科學德文）

Education (學歷)

2002- 2005 Doctorate, Institute of Immunology, Faculty of Bio Science & Mathematics, University of Heidelberg
Graduation: Doctor of science, *summa cum laude (*excellent*)*
(德國海德堡大學 免疫所，生物科學及數學學院 自然科學博士)

1998- 2001 Master study, Institute for Molecular Genetics, Faculty of biology,

University of Heidelberg
(德國海德堡大學 分子遺傳研究所，生物學院 生物學碩士)

1991- 1993 Bachelor study, Department of Plant Protection, National Pingtung, Polytechnic Institute
(國立屏東技術學院 植物保護系 學士)

Current Position and Work Experience (現職與經歷)

2006- present Assistant Professor, Department of Microbiology & Immunology, National Chiayi University
(國立嘉義大學 微生物與免疫學系 助理教授)

2006 Adj. Assist. Professor, Department of Biological Sciences & Technology, National University of Tainan
(國立台南大學 生物科技學系 兼任助理教授)

2005- 2006 Post-Doctor, Institute of Immunology, University of Heidelberg.
(德國海德堡大學 免疫研究所 博士後研究)

1995- 1996 Research Assistant, Mycology Laboratory, Tainan-Pedagogical University,
(國立台南師範學院 數理教育學系 研究助理)

1994- 1995 Research Assistant, Medical faculty of Chen-Kung University
(國立成功大學 醫學院 研究助理)

Honor /Awards (榮譽事項)

發表於 Blood 期刊之論文 [Regulation of human auto- and alloreactive T cells by indoleamine 2,3-dioxygenase (IDO)-producing dendritic cells: too much ado about IDO?]，獲得國際生物學類論文評選組織 **Faculty of 1000 Biology** 在世界諸多文章中推薦為必讀(must read)之優良文章。

Publications (文獻著作)

- **期刊論文及著作**

1. Lee MY, Liu YW, Chen MH, Wu JY, Ho HY, Wang QF, **Chuang JJ**.
Indirubin-3'-monoxime promotes autophagic and apoptotic death in JM1 human acute lymphoblastic leukemia cells and K562 human chronic myelogenous leukemia cells. **Oncol Rep**. 2013 May;29(5):2072-8 *(SCI; IF:1.835 , Ranking: 131/196)*

2. Wang CM, **Chuang JJ**.
Effect of mite allergen immunotherapy on the altered phenotype of dendritic cells in allergic asthmatic children. **Ann Allergy Asthma Immunol**. 2013 Feb;110(2):107-12. *(SCI; IF:2.833 , Ranking:7/24)*

3. Chen MH, Lee MY, **Chuang JJ**, Li YZ, Ning ST, Chen JC, Liu YW.
Curcumin inhibits HCV replication by induction of heme oxygenase-1 and suppression of AKT. **Int J Mol Med**. 2012 Nov;30(5):1021-8. *(SCI; IF:1.573 , Ranking:72/112)*

4. Chen SH, Wang YW, Hsu JL, Chang HY, Wang CY, Shen PT, Chiang CW, **Chuang JJ**, Tsai HW, Gu PW, Chang FC, Liu HS, Chow NH. Nucleophosmin in the pathogenesis of arsenic-related bladder carcinogenesis revealed by quantitative Proteomics. **Toxicol Appl Pharmacol.** 2010; 242(2):126-35 *(SCI; IF:3.359 , Ranking: 16/77)*

5. Lian KC, **Chuang JJ**, Hsieh CW, Wung BS, Huang GD, Jian TY, Sun YW. Dual mechanisms of NF-kappaB inhibition in carnosol-treated endothelial cells. **Toxicol Appl Pharmacol.** 2010; 245(1):21-35. ***(Lian KC and Chuang JJ contributed equally to this work)*** *(SCI; IF:3.359 , Ranking: 16/77)*

6. Wu JY, Tsai KW, Shee JJ, Li YZ, Chen CH, **Chuang JJ**, Liu YW. 4'- Chloro -3, 5 – dihydroxystilbene induces lung cancer cell death through multiple pathways. **Acta Pharmacol Sin**. 2010; 31(1):81-92 *(SCI; IF:1.783. , Ranking: 49/140)*

7. Terness P, Kleist C, Simon H, Sandra-Petrescu F, Ehser S, **Chuang JJ**, Mohr E, Jiga L, Greil J, Opelz G. Mitomycin C-treated antigen-presenting cells as a tool for control of allograft rejection and autoimmunity: from bench to bedside. **Hum Immunol**. 2009; 70(7): 506-512 *(SCI; IF:2.901 , Ranking: 51/119)*

8. Terness P, Oelert T, Ehser S, **Chuang JJ**, Lahdou I, Kleist C, Velten F, Hämmerling G, Arnold B, and Opelz G. Mitomycin C – treated dendritic cells inactivate autoreactive T cells *in vitro* and *in vivo*: Towards the development of a tolerogenic vaccine in autoimmune diseases. **Proc Natl Acad Sci USA.** 2008, 105(47):18442-18447 *(SCI; IF: 9.598)*

9. Ehser S, **Chuang JJ**, Kleist C, Sandra-Petrescu F, Iancu M, Wang D, Opelz G, and Terness P. Suppressive Dendritic Cells as a tool for controlling allograft rejection in organ transplantation: promises and difficulties. **Human Immunol.** 2008; 69:165-173 *(SCI; IF:2.901 , Ranking: 51/119)*

10. Terness P*, **Chuang JJ*,** and Opelz G. The immunoregulatory role of IDO-producing human

dendritic cells revisited. **Trends in Immunology.** 2006;27:68-73. *(SCI; IF: 9.480)*
(Peter Terness and Jing-Jing Chuang contributed equally to this work and should both be regarded as first author of this publication.)

11. Terness P*, **Chuang JJ***, Bauer T, Jiga L, and Opelz G. Regulation of human auto- and alloreactive T cells by indoleamine 2,3-dioxygenase (IDO)-producing dendritic cells: too much ado about IDO? **Blood.** 2005;105:2480-2486. *(SCI; IF: 10.896)*
(Peter Terness and Jing-Jing Chuang contributed equally to this work and should both be regarded as first author of this publication.)

12. Bauer TM, Jiga LP, **Chuang JJ,** Randazzo M, Opelz G, and Terness P. Studying the immunosuppressive role of indoleamine 2,3-dioxygenase: tryptophan metabolites suppress rat allogeneic T-cell responses in vitro and in vivo. **Transpl Int.** 2005;18:95-100. *(SCI; IF: 2.093; Ranking: 79/119)*

13. **Chuang JJ.** Generation of tolerogenic human dendritic cells by expression of indoleamine 2,3-dioxygenase or treatment with Mitomycin C. 2005; **Ph.D dissertation**. Uni. of Heidelberg, Germany.

14. Jiga LP, Bauer TM, **Chuang JJ**, Opelz G, and Terness P. Generation of tolerogenic dendritic cells by treatment with mitomycin C: inhibition of allogeneic T-cell response is mediated by downregulation of ICAM-1, CD80, and CD86. **Transplantation** 2004;77:1761-1764. *(SCI; IF: 3.641; Ranking 9/139)*

15. **Chuang JJ.** Expression of disulfide stabilized Fv antibody fragments in transgenic plants. 2001. **Master's thesis.** Uni. of Heidelberg, Germany.

- **研討會論文**

1. Chen YK, Hong JH, and **Chuang JJ**. (2013)
Study of immnosuppressive mechanisms of trans-chalcone treated dendritic cells
IUMMNO2013-10th International Conference on New Trends in Immunosupression and Immunotherapy. 2013, Barcelona, Spain

2. Wang CM, **Chuang JJ**. (2012)
Influences of mite-specific immunotherapy on phenotype and function of human dendritic cells in allergic asthmatic children

The European Academy of Allergy and Clinical Immunology Congress 2012, Geneva, Switzerland

3. Chang YF, Tseng YH, Hong JH, **Chuang JJ**. (2011)
Induction of allogeneic T-cell hyporesponsiveness by chalcone treated dendritic cells
2nd International Conference on Immune Tolerance. 2011, Amsterdam, Holland

4. **Chuang, JJ**, Chen YK, and Huang, YJ. (2010)
Regulation of T-cell activity by suppressive 2'-hydroxychalcone treated dendritic cells
14th International Congress of Immunology. 2010, Kobe, Japan

5. Lee MY, Liu YW, Chen MH and **Chuang JJ**. (2010)
Indirubin-3'-Monoxime induces apoptosis and autophagy in acute lymphoblastic leukemia cells and chronic myelogenous leukemia cells, exhibits limited cytotoxicity In $CD34^+$ hematopoietic stem cells, lymphocytes and granulocytes
52 th Annual Meeting of American society of hematology (ASH). 2010, Orlando, FL, USA.

6. **Chuang JJ**, Oelert T , Ehser S, Lahdou I, Kleist C , Velten F, Hämmerling GJ, Arnold B, Opelz G and Terness P (2009)
Generation of tolerogenic dendritic cells by treatment with Mitomycin C: Attractive development of a suppressive vaccine in autoimmune diseases
World Immune Regulation Meeting–III; special focus on „regulatory and effector mechanisms" 2009, Davos, Switzerland

7. Terness P, Ehser S, **Chuang JJ**, , Sandra F, Kleist C, Jiga L and Opelz G. (2008)
Generation of tolerogenic dendritic cells for inhibition of allograft rejection: mediation of suppression by ILT-3, adrenomedullin, and apoptosis?
XXII International Congress of the Transplantation Society (ICIS). 2008, Sydney, Australia

8. Terness P , **Chuang JJ** , Ehser S, Bauer T, Lahdou I, Iancu M, Kleist C, Simon H, Grimm S, Christ C, Hexel M, and Opelz G (2007)

IDO-producing human dendritic cells: do they suppress the T -cell response?
5th International Meeting on: Dendritic Cell Vaccination and other Strategies to tip the Balance of the Immune System 2007, Bamberg, Germany

9. **Chuang JJ,** Opelz G, and Terness P (2005)
Regulation of human T cell activity by suppressive Mitomycin C- treated dendritic cells. 36th Annual Meeting of the German and Scandinavian Societies of Immunology 2005, Kiel, Germany

10. Terness P, Jiga L, Bauer T, **Chuang JJ**, and Opelz G (2004)
Generation of Suppressive Dendritic Cells by Treatment with Mitomycin C: Mechanism of Action and Effect on Heart Allograft Rejection
12th International Congress of Immunology and the 4th Annual Conference of FOCIS 2004, Montréal, Québec, Canada.

11. Bauer TM, **Chuang JJ**, Jiga L, Opelz G, and Terness P (2003)
Generation of suppressive dendritic cells by transgenetic expression of IDO-Gene.
11th Congress of the European Society for Organ Transplantation 2003, Venice, Italy