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#### Education :

Ph.D. Department of Physics and Applied Physics, Radiological Sciences, University of Massachusetts, MA, USA

### **Career Experience** :

Medical Physicist, Dept of Radiation Oncology, Lowell General Hospital, MA. USA. Medical Physicist, J. T. Radiotherapy Center, Lahey Clinic Medical Center, MA. USA.

### Courses Taught :

**Radiation Measurement** 

Radiation Therapy

Radiation Dosimetry

### Professional Fields :

Radiation Therapy

### Research Interests :

Radiation Therapy

### **Representative Publication in 5 Years** :

### Journal Articles :

### <u>2011</u>

 Chia-Hung Hsiao, Cheng-Ying Shiau, Yu-Ming Liu, <u>Max Min Chao</u>, Chung-Yueh Lien, Chi-Hsien Chen, Sang-Hue Yen, Shih-Tsang Tang, Use of a Rich Internet Application Solution to Present Medical Images J of Digital Imaging, 2011 Mar 19 [Epub ahead of print] (SCI)

# <u>2010</u>

- Jia-Ming Wu, Shyh-An Yeh\* Kuan-Yin Hsiao, <u>Max Min Chao</u>, Ishiuan Hargrove, A Conceptual Design of Rotating Board Technique for Delivering Total Skin Electron Therapy, Medical Physics, 2010, Vol.37, No.4, 1449-1458 (SCI)
- Jia-Ming Wu\*, Shyh-An Yeh, Kuan-Yin Hsiao, Chung-Ming Kuo, Ching-Jiang Chen, <u>Max Min Chao</u>, Determination of Optima Radiosurgery Shot location using Geomatric Mathematic Method of GammaPlan in Gamma Knife therapy, Taiwan Journal of Applied Radiation and Isotopes, 2010, Vol.6, No.1, 811-818
- Kuan-Yin Hsiao, Shyh-An Yeh, \*Jia-Ming Wu, Chung-Ming Kuo, Ching-Jiang Chen, <u>Max Min Chao</u>, Dose Measurement and Verification of Liquid in Culture Disc Delivered by Medical Linear Accelerator by Using Gaf Chromic EBT2 Film, Taiwan Journal of Applied Radiation and Isotopes,

2010, Vol.6, No.2, 881-886

- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Chung-Ming Kuo, Ching-Jiang Chen, <u>Max Min Chao</u>, Special Design Dumbbells Template for Fixation in Prostate Needle Implant Procedure, Taiwan Journal of Applied Radiation and Isotopes, 2010, Vol.6, No.3, 899-906
- Shyh-An Yeh, Kuan-Yin Hsiao, \*Jia-Ming Wu, Chung-Ming Kuo, Ching-Jiang Chen, <u>Max Min Chao</u>, Study of the Dose of Neutron Contamination to Patients Treated with Intensity Modulated Radiation Therapy, Taiwan Journal of Applied Radiation and Isotopes, 2010, Vol.6, No.3, 907-915

## <u>2009</u>

- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Tzong-Jer Chen, <u>Max M. Chao</u>, Target Dose Verification and Critical Organ Dose Check of Breast Cancer by Using Thermoluminscence and Film Dosimetry, Taiwan Journal of Applied Radiation and Isotopes, 2009, Vol.5, No.4, 751-758
- \*Shyh-An Yeh, Jia-Ming Wu, Kuan-Yin Hsiao, <u>Max M. Chao</u>, Tzong-Jer Chen, Electron Dose Calculation Affected by Virtual Source Position, Taiwan Journal of Applied Radiation and Isotopes, 2009, Vol.5, No.4, 793-804
- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Tzong-Jer Chen, <u>Max M. Chao</u>, The Introduction and Comparison of Cyclotron and Synchrotron Proton Treatment Machine, Taiwan Journal of Applied Radiation and Isotopes, 2009, Vol.5, No.1, 623-636
- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Tzong-Jer Chen, <u>Max M. Chao</u>, The Analysis and Study of Dose Delivery System of Proton Facility, Taiwan Journal of Applied Radiation and Isotopes, 2009, Vol.5, No.2, 683-692
- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Tzong-Jer Chen, <u>Max M. Chao</u>, The Introduction and Analysis of the Physics Aspect of Proton Treatment, Taiwan Journal of Applied Radiation and Isotopes, 2009, Vol.5, No.2, 645-652
- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, <u>Max M. Chao</u>, S.W. Leung, A New Technique to Improve Patient Skin Dosage in Total Skin Electron Therapy. Therapeutic Radiology and Oncology. 2009, 16: 125-134.

### <u>2008</u>

- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Bor-Tsung. Hsieh, <u>Max M. Chao</u>, Tzong-Jer Chen, S.W. Leung, Images Composition Analysis By Using Wavelet Discrete Transformation, Taiwan Journal of Applied Radiation and Isotopes, 2008, Vol.4, No.4, 561-570
- Jia-Ming Wu, \*Shyh-An Yeh, S.W. Leung, Kuan-Yin Hsiao, Bor-Tsung. Hsieh, Tzong-Jer Chen, <u>Max</u> <u>M. Chao</u>, The Study of Dwelling Time Design in Beta-Radiation to Prevent Restenosis after Percutaneous Transluminal Coronary Angioplasty, Taiwan Journal of Applied Radiation and Isotopes, 2008, Vol.4, No.4, 529-542
- Jia-Ming Wu, \*Shyh-An Yeh, Kuan-Yin Hsiao, Bor-Tsung. Hsieh, <u>Max M. Chao</u>, Tzong-Jer Chen, S.W. Leung, The Study of Beta and Gamma Radioisotopes Brachytherapy 3-Dimensional Dose

Distribution by Polymer Gel Dosimetry Technique, Taiwan Journal of Applied Radiation and Isotopes, 2008, Vol.4, No.4, 521-528

- Jia-Ming Wu, Shyh-An Yeh\*, Kuan-An Chu, <u>Max M. Chao</u>, S.W. Leung, Dose Delivery Affected by Round Leaf end Position in Split Field of Intensity Modulation Radiation Therapy, Taiwan Journal of Applied Radiation and Isotopes, 2008, Vol.4, No.3, 489-498
- Jin-Huei Ji, Kwo-Ping Chang, An-Cheng Shiau, Hsin-Hsiung Chen, Shih-Neng Yang, Lung-Kwang Pan, Ji-An Liang, <u>\*Max M. Chao</u>; Parametric Studies of the Electron Source Term in Monte Carlo Simulation on Clinical LINACs. Therapeutic Radiology and Oncology. 2008, 15: 129-137.

## <u>2007</u>

- Kwang-Shiuan Lin, Ho-Hsing Chen, Hsin-Hsiung Chen, Kuo-Ping Chang, <u>\*Max M. Chao</u>; Oral Cavity Dosimetry for Intensity Modulated Radiation Therapy Quality Assurance. Therapeutic Radiology and Oncology. 2007, 14: 19-27.
- Kuo-Chi Liu, An-Cheng Shiau, <u>Max M. Chao</u>, Ji-An Liang, Shin\_Neng Yang, Ching-Hsiung Su, Wen-Pin Shih, Hsin-Hsiung Chen; Surface Dose Measurement in Intensity Modulated Radiotherapy. Therapeutic Radiology and Oncology. 2007, 14: 113-121.
- <u>\*Max M. Chao</u>, Liang S. Chao, Yuh L. Lee, and Sang H. Yen; A Viewing Station for Digitally Reconstructed Radiographs and Digital Portal Images. J of Central Taiwan University of Science and Technology. 2006, 17: 180-193.

### **Conference Papers** :

# <u>2011</u>

- Yu-Che Hsu, Ho-Hsing Chen, Yi-Tsun Lu, Chun-Yen Yu, Po-Ching Lin, Wen-Tsae Chou, Ji-An Liang, <u>Max Min Chao</u>: Dosimetry of motion target in Helical Tomotherapy. The 18th Asia and Australasia Conference of Radiological Technologists, Kaohsiung, 2011
- Yi-Tsun Lu, Chun-Yen Yu, Yu-Che Hsu, Po-Ching Lin, Wen-Tsae Chou, Ji-An Liang, <u>Max Min</u> <u>Chao</u>: Motion-induced dose artifact in Intensity Modulated Radiation Therapy. The 18th Asia and Australasia Conference of Radiological Technologists, Kaohsiung, 2011

### <u>2010</u>

- Tsu-Hsien Wu, David Huang, Ho-Hsing Chen, <u>Max Min Chao</u>: Dosimetry Comparison for Various Intro-Oral Block in Tongue Cancer Patient with Intensity Modulation Radiation Therapy. The 5th Conference of International Medical Imaging and Radiological Sciences, Hualien, 2010
- Xi Fan, Ho-Hsing Chen, David Huang, <u>Max Min Chao</u>: Feasibility Study on Intensity Modulated Radiation Therapy for Total Body Irradiation. The 5th Conference of International Medical Imaging and Radiological Sciences, Hualien, 2010
- 5. Tsu-Hsien Wu, Ho-Hsing Chen, <u>Max M. Chao</u>: Dosimetry Comparison for Various Intro-Oral Block

in Tongue Cancer Patient Radiation Therapy via EBT film and Self-made Acrylic Pantom. The 43rd Annual Meeting of TWSRT, Kaohsiung, 2010

 Xi Fan, Ho-Hsing Chen, <u>Max M. Chao</u>: Applying the Intensity Modulated Radiation Therapy in Total Body Irradiation via TLD and EBT Film to Verify. The 43rd Annual Meeting of TWSRT, Kaohsiung, 2010

# <u>2008</u>

- Li Shiau-Ying, <u>Chao Max Min</u>, Chang Chiou-Shiung, Hwang Jing-Min, Hsu Wen-Lin: The Application of Quantitative index for Prostate IMRT. The 13th Taiwan Joint Cancer Conference, Taipei, 2008
- Li Shiau-Ying, <u>Chao Max Min</u>, Chang Chiou-Shiung, Hwang Jing-Min, Hsu Wen-Lin: The Clinical Performance Index for Prostate IMRT. The 8th Taiwan-Japan-Korea International Joint Conference of Radiological Technologists, Hsinchu, 2008
- Dan-Guey Chiu, Yu-Ming Liu, Liung-Sheau Chao, Yuh-Lin Lee, Ling-Wei Wang, Sang-Hue Yen, David Huang, <u>Max Min Chao</u>: The Comparisons of RTP Results with Tumor Response for Cervical Cancer for Different Treatment Techniques. The 4th Conference of International Medical Imaging and Radiological Sciences, Kaohsiung, 2008
- Chiu Dan-Guey Liu Yu-Min Zhao Liang-Xiao Li Yu-Lin Wang Ling-Wei Yan Shang-Hui David Huang <u>Chao Min</u>: Intensity-Modulated Radiation Therapy Markers with three-phase CT Imaging: Assessment of Cervical cancer tumor response. The 13th Taiwan Joint Cancer Conference, Taipei, 2008

# <u>2007</u>

- Chu KA, Wang LW, Chao LS, Huang DY, Hsiao CJ, Yeh KC, Lee YL, Yen SH, <u>Chao MM</u>: Treatment Planning Comparison On Normal Tissue Complication Probability and Tumor Control Probability in the Preoperative Pelvic Irradiation for Rectal Cancer. The 49th AAPM Annual Meeting, Minneapolis, Minnesota, USA 2007
- 12. Li Shiau-Ying, <u>Chao Max Min</u>, Chang Chiou-Shiung, Hwang Jing-Min, Hsu Wen-Lin: The characterization of 2D ionization chamber Matrix device for IMRT verification. The 5th Rep. of China-Japan-Korea International Joint Conference of Radiological Technologists, Kaohsiung, 2007
- Chu Kuan-An, Chao Liung-Sheau, Wang Ling-Wei, Yen Sang –Hue, <u>Chao Max Min</u>: Ranking the treatment planning of rectal cancer based on biological index. The 5th Rep. of China-Japan-Korea International Joint Conference of Radiological Technologists, Kaohsiung, 2007
- Chang Chiou-Shiung, Li Shiau-Ying, Hwang Jing-Min, Chang Yok-Kong, <u>Chao Max M.</u>, Hsu Wen-Lin: The Application of Rapid Fluence Editor to Improve Breast Treatment Planning. The 56th Conference of Radiological Society of the Rep. of China, Taipei, 2007

<u>2006</u>

- Chi CH, Shiau AC, Yang SN, Chang KP, Pan LK, Chen HH, Liang JA, <u>Chao MM</u>: A Monte Carlo Study of Dose Distributions in Clinical Photon Beam. The 11th Taiwan Joint Cancer Conference, Taipei, 2006
- Lin KS, Chen HH, Chang KP, <u>Chao MM</u>: In vivo film dosimetry for intensity modulated radiation therapy quality assurance. The 2ed Rep. of China Japan Korea International Joint Conference for Radiological Technologists, Taichung, 2006
- Chu KA, Chao LS, Wang LW, Yen SH, <u>Chao MM</u>: Treatment planning comparison on normal tissue complication probability in the postoperative pelvic irradiation for rectal cancer. The 2ed Rep. of China Japan Korea International Joint Conference for Radiological Technologists, Taichung, 2006
- Chi CH, Shiau AC, Yang SN, Chang KP, Pan LK, Chen HH, <u>Chao MM</u>: A Monte Carlo Study of Dose Distributions in Clinical Photon Beam. The 2ed Rep. of China Japan Korea International Joint Conference for Radiological Technologists, Taichung, 2006