# Yuan-Mao Lin, MD

Diagnostic and Interventional Radiology
The University of Texas MD Anderson Cancer Center
<a href="mailto:ylin22@mdanderson.org">ylin22@mdanderson.org</a> (mailto:ylin22@mdanderson.org)

# **Education and Postgraduate Training**

# **Fellowships**

- Clinical Fellow, Department of Interventional Radiology, University of Texas MD Anderson Cancer Center, Houston, USA
   July 01, 2023 – Present
- Research Fellow, Department of Interventional Radiology, University of Texas MD Anderson Cancer Center, Houston, USA (Supervisor: Dr. Bruno Odisio)
   January 28, 2020 – June 30, 2023
- Abdominal Radiology Fellow, Department of Radiology, Taipei Veterans General Hospital, Taipei, Taiwan (Supervisor: Dr. Rheun-Chuan Lee)
   September 1, 2019 – December 31, 2019

## **Residencies**

- Department of Radiology, Taipei Veterans General Hospital, Taipei, Taiwan
   August 3, 2015 August 31, 2019
- Department of Primary Care Medicine, Mackay Memorial Hospital, Taipei, Taiwan
   August 1, 2013 July 31, 2014

### **Medical Internship**

 Department of Medical Research and Education, Taipei Veterans General Hospital, Taipei, Taiwan
 June 1, 2012 – May 31, 2013

## **Doctor of Medicine (M.D.)**

School of Medicine, National Yang-Ming University, Taipei, Taiwan
 September 1, 2006 – June 30, 2013

### **Honors and Awards**

# RSNA R&E Foundation Roentgen Resident/Fellow Research Award RSNA (2024)

### Editor's Recognition Award

Radiology: Imaging Cancer (March 2024)

#### Oral presentation Award

Trainee Research Day, The University of Texas MD Anderson Cancer Center, Houston, TX, USA (March 2024)

### Interventional Oncology Essential Scholarship

Society of Interventional Oncology Annual Meeting, Long Beach, CA, USA (January 2024)

### Best Oral Presentation Award (First Prize)

Trainee Research Day, The University of Texas MD Anderson Cancer Center, Houston, TX, USA (March 2023)

#### Oral Presentation Award

Asian Conference on Tumor Ablation, Chiayi, Taiwan (October 2019)

### "Invest in the Youth" programme Scholarship

European Congress of Radiology, Vienna, Austria (March 2018)

### • Best Scientific Exhibition (Silver)

The 6th Asian Congress of Abdominal Radiology, Busan, Korea (April 2017)

### Young Investigator Award

The 6th Asian Congress of Abdominal Radiology, Busan, Korea (April 2017)

# **Journal Review Activities**

Radiology: Imaging Cancer (Trainee Editorial Board) (2023 – Present)

- Reviewer of Abdominal Radiology (2024-Present)
- Reviewer of Frontiers in Oncology (2023 Present)
- Reviewer of European Radiology (2017 2018)

# **Publications**

- Odisio BC, Albuquerque J, Lin YM, Anderson BM, O'Connor CS, Rigaud B, Briones-Dimayuga M, Jones AK, Fellman BM, Huang SY, Kuban J, Metwalli ZA, Sheth R, Habibollahi P, Patel M, Shah KY, Cox VL, Kang HC, Morris VK, Kopetz S, Javle MM, Kaseb A, Tzeng CW, Cao HT, Newhook T, Chun YS, Vauthey JN, Gupta S, Paolucci I, Brock KK. Software-based versus visual assessment of the minimal ablative margin in patients with liver tumours undergoing percutaneous thermal ablation (COVER-ALL): a randomised phase 2 trial. Lancet Gastroenterol Hepatol. 2025 Mar 13:S2468-1253(25)00024-X.
- Lin YM, Paolucci I, Albuquerque Marques Silva J, O'Connor CS, Hong J, Shah KY, Abdelsalam ME, Habibollahi P, Jones KA, Brock KK, Odisio BC. Ablative margin quantification using deformable versus rigid image registration in colorectal liver metastasis thermal ablation: a retrospective single-center study. Eur Radiol. 2024 Feb 9.
- Paolucci I, Albuquerque Marques Silva J, Lin YM, Laimer G, Cignini V, Menchini F, Meira M, Shieh A, O'Connor C, Jones KA, Gazzera C, Fonio P, Brock KK, Calandri M, Menezes M, Bale R, Odisio BC. Identification of A0 minimum ablative margins for colorectal liver metastases: multicentre, retrospective study using deformable CT registration and artificial intelligence-based autosegmentation. Br J Surg. 2024 Aug 30.
- Albuquerque J, Lin YM, Paolucci I, O'Connor CS, Tzeng CW, Vauthey JN, Brock KK, Odisio BC. Incidental Ring-hyperenhancing Liver Micronodules at CT Hepatic Arteriography-guided Percutaneous Thermal Ablation of Colorectal Liver Metastases. Radiol Imaging Cancer. 2024 Mar.
- Lin YM, Paolucci I, Albuquerque Marques Silva J, O'Connor CS, Fellman BM, Jones AK, Kuban JD, Huang SY, Metwalli ZA, Brock KK, Odisio BC. Intraprocedural Versus

- Initial Follow-up Minimal Ablative Margin Assessment After Colorectal Liver Metastasis Thermal Ablation: Which One Better Predicts Local Outcomes? Invest Radiol. 2023 Oct 9.
- Paolucci I, Lin YM, Albuquerque Marques Silva J, Brock KK, Odisio BC. Bayesian parametric models for survival prediction in medical applications. BMC Med Res Methodol. 2023 Oct 26.
- Lin YM, Fellman BM, Taiji R, Paolucci I, Silva JAM, Koay EJ, Avritscher R, Mahvash A, Holliday EB, Lee SS, Kaseb AO, Das P, Vauthey JN, Odisio BC. Salvage Locoregional Therapy Following Progression After Radiotherapy for Hepatocellular Carcinoma Is Associated with Improved Outcomes. J Gastrointest Surg. 2023 Jun 2.
- Paolucci I, Albuquerque Marques Silva J, Lin YM, Fellman BM, Jones KA, Tatsui CE, Weinberg JS, Ruiz J, Tan J, Brock KK, Bale R, Odisio BC. Study Protocol STEREOLAB: Stereotactic Liver Ablation Assisted with Intra-Arterial CT Hepatic Arteriography and Ablation Confirmation Software Assessment. Cardiovasc Intervent Radiol. 2023 Aug 10.
- Lin YM, Paolucci I, O'Connor CS, Anderson BM, Rigaud B, Fellman BM, Jones KA, Brock KK, Odisio BC. Ablative Margins of Colorectal Liver Metastases Using Deformable CT Image Registration and Autosegmentation. Radiology. 2023 Jan 31.
- Mosconi C, O'Rourke J, Kloeckner R, Sturm L, Golfieri R, Celsa C, Fateen W, Odisio BC, Garanzini EM, Peck-Radosavljevic M, Borghi A, Ma YT, Stoehr F, Bettinger D, Giuffrida P, Aithal GP, Lin YM, Spreafico C, Giampalma E, Johnson P, Cucchetti A. Textbook Outcome After Transarterial Chemoembolization for Hepatocellular Carcinoma. Cardiovasc Intervent Radiol. 2023 Feb 27.
- Taiji R, Lin YM, Chintalapani G, Lin EY, Huang SY, Mahvash A, Avritscher R, Liu CA, Lee RC, Resende V, Nishiofuku H, Tanaka T, Kichikawa K, Klotz E, Gupta S, Odisio BC. A novel method for predicting hepatocellular carcinoma response to chemoembolization using an intraprocedural CT hepatic arteriography-based enhancement mapping: a proof-of-concept analysis. Eur Radiol Exp. 2023 Jan 30.
- Paolucci I, Lin YM, Jones AK, Brock KK, Odisio BC. Use of Contrast Media During
   CT-guided Thermal Ablation of Colorectal Liver Metastasis for Procedure Planning

- is Associated with Improved Immediate Outcomes. Cardiovasc Intervent Radiol. 2023 Jan 6.
- Lin YM, Odisio BC, Sofocleous CT (2022) Radiofrequency Ablation,
   Electroporation, and Microwave Ablation. In: Vauthey J-N, Kawaguchi Y, Adam R,
   (eds) Colorectal Liver Metastasis. Springer International Publishing, Cham, pp 377-387. (Book chapter)
- Paolucci I, Lin YM, Kawaguchi Y, Maki H, Jones AK, Calandri M, Kopetz S, Newhook TE, Brock KK, Vauthey JN, Odisio BC. Targeted exome-based predictors of patterns of progression of colorectal liver metastasis after percutaneous thermal ablation. Br J Cancer. 2022 Nov 1.
- Lin YM, Paolucci I, Anderson BM, O'Connor CS, Rigaud B, Briones-Dimayuga M, Jones KA, Brock KK, Fellman BM, Odisio BC. Study Protocol COVER-ALL: Clinical Impact of a Volumetric Image Method for Confirming Tumour Coverage with Ablation on Patients with Malignant Liver Lesions. Cardiovasc Intervent Radiol. 2022 Sep 4.
- Anderson BM, Rigaud B, Lin YM, Jones AK, Kang HC, Odisio BC, Brock KK.
   Automatic segmentation of colorectal liver metastasis and liver ablation on contrast-enhanced CT images. Front Oncol. 2022 Aug 11.
- Lin YM, Bale R, Brock KK, Odisio BC. Contemporary evidence on colorectal liver metastases ablation: toward a paradigm shift in locoregional treatment. Int J Hyperthermia. 2022.
- **Lin YM**, Paolucci I, Brock KK, Odisio BC. Image-Guided Ablation for Colorectal Liver Metastasis: Principles, Current Evidence, and the Path Forward. Cancers. 2021.
- Taiji R, Lin EY, Lin YM, Yevich S, Avritscher R, Sheth RA, Ruiz JR, Jones AK, Chintalapani G, Nishiofuku H, Tanaka T, Kichikawa K, Gupta S, Odisio BC. Combined Angio-CT Systems: A Roadmap Tool for Precision Therapy in Interventional Oncology. Radiol Imaging Cancer. 2021 Sep.
- Anderson BM, Lin YM, Lin EY, Cazoulat G, Gupta S, Jones AK, Odisio BC, Brock KK.
   A novel use of biomechanical model based deformable image registration (DIR) for assessing colorectal liver metastases ablation outcomes. Med Phys. 2021 Aug 3.
- Lin YM, Lin EY, Tseng HS, Lee RC, Huang HE, Wang SE, Shyr YM, Liu CA.

Preventive covered stent placement at the gastroduodenal artery stump in angiogram-negative sentinel hemorrhage after pancreaticoduodenectomy. Abdom Radiol (NY). 2021 May 26.

- Lin YM, Taiji R, Calandri M, Odisio BC. Tumor Biomarkers and Interventional Oncology: Impact on Local Outcomes for Liver and Lung Malignancy. Curr Oncol Rep. 2021 Apr 15.
- **Lin YM**, Chiou YY, Wu MH, Huang SS, Shen SH. Postablation assessment of hepatocellular carcinoma using dual-energy CT: Comparison of half versus standard iodine contrast medium. Plos One. 2019 Jul 9.
- **Lin YM**, Chiou YY, Wu MH, Huang SS, Shen SH. Attenuation values of renal parenchyma in virtual noncontrast images acquired from multiphase renal dualenergy CT: Comparison with standard noncontrast CT. Eur J Radiol 2018.
- **Lin YM**, Guo WY. Longitudinal MR Follow-up of Pallister-Hall Syndrome: From Fetus to Childhood. Journal of Radiological Science; 2017.
- **Lin YM**, Chiu NC, Li AFY, Liu CA, Chou YH, Chiou YY. Unusual gastric tumors and tumor-like lesions: Radiological with pathological correlation and literature review. World J Gastroenterol 2017.

# **Oral Presentations and Posters**

- Lin YM, Paolucci I, Albuquerque Marques Silva J, Brock KK, Odisio BC. The use of deformable or rigid image registration to quantify the ablative margin in colorectal liver metastasis thermal ablation. Society of Interventional Radiology Annual Meeting, Long Beach, CA, USA (January 2024) – Poster
- Lin YM, Paolucci I, Albuquerque Marques Silva J, Reto B, Brock KK, Odisio BC.
  Hepatic arterial versus portal venous phase CT for colorectal liver metastasis
  segmentation: impact on ablative margin quantification and local outcomes.
   Society of Interventional Radiology Annual Meeting, Long Beach, CA, USA (January
  2024) Poster
- Albuquerque Marques Silva J, Lin YM, Paolucci I, Brock KK, Odisio BC.
   Percutaneous Thermal Ablation for Intrahepatic Cholangiocarcinoma: Efficacy and

- Local Tumor Progression Factors. Society of Interventional Radiology Annual Meeting, Long Beach, CA, USA (January 2024) Poster
- Paolucci I, Albuquerque Marques Silva J, Lin YM, Brock KK, Odisio BC. Minimum ablation margin assessment using AI-segmentation and biomechanical deformable image registration – an international multicenter study. Society of Interventional Radiology Annual Meeting, Long Beach, CA, USA (January 2024) – Poster
- Paolucci I, Lin YM, Albuquerque Marques Silva J, Brock KK, Odisio BC. Can longitudinal circulating tumor DNA testing replace initial follow-up imaging after thermal ablation of colorectal liver metastasis? Society of Interventional Radiology Annual Meeting, Long Beach, CA, USA (January 2024) – Poster
- Lin YM, Paolucci I, Albuquerque Marques Silva J, Odisio BC. Ablative margin quantified by intraprocedural CT is a stronger predictor of ablation outcomes than initial follow-up CT in colorectal liver metastasis thermal ablation. Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Copenhagen, Denmark (September 2023) – Oral present
- Lin YM, Paolucci I, Albuquerque Marques Silva J, Odisio BC. Arterial versus portal venous phase CT for colorectal liver metastasis segmentation for ablative margins assessment: which one best predicts local outcomes? Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Copenhagen, Denmark (September 2023) – Poster
- Paolucci I, Lin YM, Albuquerque Marques Silva J, Odisio BC. Stereotactic ablation
  of colorectal liver metastasis aided with intra-arterial CT hepatic arterography and
  ablation confirmation software assessment (STEREOLAB). Cardiovascular and
  Interventional Radiological Society of Europe Annual Meeting, Copenhagen,
  Denmark (September 2023) Oral present
- Albuquerque Marques Silva J, Lin YM, Paolucci I, Odisio BC. Computed tomography during hepatic arteriography-guided percutaneous thermal ablation for colorectal liver metastases – what we know and what is on the horizon? Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Copenhagen, Denmark (September 2023) – Poster
- Albuquerque Marques Silva J, Lin YM, Paolucci I, Odisio BC. Incidental ring

hyperenhancing liver micronodules detected on computed tomography during Hepatic arteriography-guided percutaneous thermal ablation of colorectal liver metastasis: what is the relevance? Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Copenhagen, Denmark (September 2023) – Poster

- Paolucci I, Lin YM, Albuquerque Marques Silva J, Odisio BC. Ablation margin confirmation after thermal ablation of liver tumors using open source software.
   Cardiovascular and Interventional Radiological Society of Europe Annual Meeting,
   Copenhagen, Denmark (September 2023) – Poster
- Paolucci I, Lin YM, Albuquerque Marques Silva J, Odisio BC. Prospective observational evaluation of predictive models for thermal ablation outcomes of colorectal liver metastasis. Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Copenhagen, Denmark (September 2023) – Poster
- Hong J, Snoddy E, Jones A, O'Connor C, Lin YM, Paolucci I, Odisio BC, Brock KK.
   Evaluating the feasibility of using reduced scan length for non-contrast CT during image-guided liver ablations. SPIE Medical Imaging, San Diego, CA, USA Poster
- Lin YM, Paolucci I, Odisio BC. Is the minimal ablative margin quantified on intraprocedural post-ablation CT better than initial follow-up CT in predicting colorectal liver metastasis? Society of Interventional Oncology Annual Meeting, DC, USA (January 2023) – Oral Present (Highlight abstract)
- Paolucci I, Lin YM, Odisio BC. Radiomics-based predictive models for new intrahepatic tumors following thermal ablation of colorectal liver metastasis.
   Society of Interventional Oncology Annual Meeting, DC, USA (January 2023) – Oral Present
- Lin YM, O'Connor C, Anderson B, Paolucci I, Fellman B, Jones A, Brock K, Odisio B.
   Minimum ablation margin assessment of colorectal liver metastasis using a novel
   Al-based automatic segmentation and biomechanical deformable registration.
   Cardiovascular and Interventional Radiological Society of Europe Annual Meeting,
   Barcelona, Spain (September 2022) Oral Present
- **Lin YM**, Fellman B, Taiji R, Paolucci I, Koay E, Avritscher R, Mahvash A, Holliday E, Lee S, Kaseb A, Das P, Vauthey J, Odisio B. Salvage locoregional therapy for

- hepatocellular carcinoma is associated with improved outcomes. Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Barcelona, Spain (September 2022) Poster
- Odisio BC, Lin YM, Paolucci I, Sheth R, Metwalli Z, O'Connor C, Briones-Dimayuga M, Chu Y, Vauthey J, Fellman B, Jones A, Brock K. Clinical impact of a volumetric image method for confirming tumor coverage with Ablation on patients with malignant Liver Lesions (COVER-ALL Trial). Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Barcelona, Spain (September 2022) Oral Present
- Paolucci I, Lin YM, Odisio BC. Local vs. distant progression following thermal ablation of colorectal liver metastasis – what is worse? Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Barcelona, Spain (September 2022) – Oral Present
- Paolucci I, Lin YM, Odisio BC. Targeted exome-based predictors of progression patterns of patients with colorectal liver metastasis after percutaneous thermal ablation. Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Barcelona, Spain (September 2022) – Oral Present
- Paolucci I, Lin YM, Odisio BC. The added value of intra-procedural contrast enhanced CT prior to thermal ablation of colorectal liver metastasis. Society of Interventional Radiology Annual Meeting, Boston, MA, USA (June 2022) – Oral Present
- Paolucci I, Lin YM, Odisio BC. Radiomics-based local tumor progression risk prediction prior to thermal ablation of colorectal liver metastasis. Society of Interventional Oncology Annual Meeting, San Francisco, CA, USA (Feb 2022) – Poster
- Taiji R, Milind J, Uruba S, Gazzera C, Fonio P, Della Corte A, Decobelli F, Lin YM,
  Calandri M, Odisio B. A multi-institutional investigation of image-guided
  percutaneous ablation for intrahepatic cholangiocarcinoma: outcomes analysis and
  impact of molecular profiling. Society of Interventional Radiology Annual Meeting,
  Virtual Meeting (Mar 2021) Oral Present
- Lin YM, Liu CA, Tseng HS, Lee RC. Effectiveness of drug-eluting bead transarterial

- chemoembolization and transarterial radioembolization for patients with large hepatocellular carcinoma. Society of Interventional Radiology Annual Meeting, Seattle, WA, USA (Mar 2020) – Poster
- Lin YM, Lin EY, Lee RC. The Clinical Outcome of Utilizing Prophylactic Covered Stent in Patients with Sentinel Hemorrhage After Pancreaticoduodenectomy.
   Radiological Society of North America Annual Meeting, Chicago, IL, USA (Dec 2019) – Oral Present
- Lin YM, Shen SH. Clinical Outcome of Percutaneous Cryoablation versus Partial Nephrectomy for stage T1b Renal Cell Carcinoma. The 6th Asian Conference on Tumor Ablation, Chiayi, Taiwan (Oct 2019) – Oral Present
- Lin YM, Lin KH, Shen SH. The Value of Multiparametric 11C-Acetate PET-MRI as an One-Stop-Shop Assessment for Prostate Cancer. American Roentgen Ray Society Annual Meeting, Hawaii, USA (May 2019) Poster
- Lin YM, Chiu NC, Chiou YY. Clinical outcome of Radiofrequency and Microwave
   Ablation in small and medium size HCC. Cardiovascular and Interventional
   Radiological Society of Europe Annual Meeting, Lisbon, Portugal (September 2018)
   – Poster
- Lin YM, Weng CY, Chiu NC, Chiou YY. Efficacy of radiofrequency ablation and microwave ablation for small and medium size HCC. Asian Pacific Association for the Study of the Liver Single Topic Conference (APASL STC), Yokohama, Japan (May 2018)

  – Oral Present
- Lin YM, Shen SH, Wu MH, Chiou YY. Evaluation the CT number of Renal Parenchyma and Masses in Virtual Noncontrast Images Acquired from Dual-Energy Dynamic Kidney CT: Compared with Standard Noncontrast CT Images. European Congress of Radiology, Vienna, Austria (March 2018) – Oral Present
- Lin YM, Chiou YY, Li A FY, Liu CA, Chiu NC, Chou YH. Unusual Gastric Tumors: Spectrum of Multidetector Computed Tomography Findings with Pathologic Correlation. The 6th Asian Congress of Abdominal Radiology, Busan, Korea (April 2017) – Poster
- Lin YM, Li A FY, Chiou YY. Multidetector Computed Tomography of Uncommon
   Gastric Tumors. European Congress of Radiology, Vienna, Austria (March 2017) –

# **Invited Lecture**

- Anatomical Modeling to Improve the Precision of Image Guided Liver Ablation: A
   COVER-ALL Clinical Trial Update. The Image Guided Cancer Therapy (IGCT)
   Research Program Seminar, The University of Texas MD Anderson Cancer Center,
   Houston, TX, USA (June 2022)
- Image-Guided Ablation for Colorectal Liver Metastasis: Principles, Current Evidence, and the Path Forward. Keynote speech of Radiology, Taipei Veterans General Hospital, Taipei, Taiwan (Nov 2021)