Marcus Timothy Joy, D.D.S.

EDUCATION

The Ohio State University, Columbus, Ohio Residency Oral and Maxillofacial Surgery, 2016 – 2020

The Ohio State University, Columbus, Ohio Doctor of Dental Surgery, 2012 – 2016

The Ohio State University, Columbus, Ohio Selected for Oral and Maxillofacial Surgery Student Internship, 2015 – 2016

The Ohio State University, Columbus, Ohio Bachelor of Science in Pharmaceutical Sciences, 2008 – 2012

MEBERSHIPS, AWARDS & HONORS

Member of the American Association of Oral and Maxillofacial Surgeons, 2016 - Present

Member of the Ohio Dental Association, 2016 - Present

Member of the American Dental Association, 2016 - Present

American Association of Oral and Maxillofacial Surgeons Dental Student Award, 2016

The Ohio State University College of Dentistry, Dean's List, 2012-2016

Ohio Third Frontier Internship Research Grant Winner, 2010, 2011, 2012

National Society of Collegiate Scholars, 2009 – 2014

Associate Member, Sigma Xi: The Scientific Research Society, 2009 – 2013

The Ohio State University College of Pharmacy Dean's List, 2008 – 2012

LEADERSHIP

The Ohio State University Wexner Medical Center Oral and Maxillofacial Surgery Chief Resident, 2019 – 2020

The Ohio State University College of Dentistry Student Government Association Treasurer, 2015 – 2016

EMPLOYMENT

The Ohio State University Wexner Medical Center, Columbus, Ohio Oral and Maxillofacial Surgery Resident, June 2016 – June 2020

Navidea Biopharmaceuticals, Inc., Dublin, Ohio Clinical Research, August 2009 – August 2012

PENDING PAPERS

- 1. Joy, Marcus T.; Kennedy, Kelly S.; Dental Implant Training A Survey of Current Residents in Oral and Maxillofacial Surgery. 2020
- Dowdy, Regina A.E.; Gray, Chantel A.; Joy, Marcus T.; Jacobs, Todd M.; Jatana, Courtney A.; Case Report: Extraction of Third Molars in a Fontan Repair Patient. 2020
- 3. Dowdy, Regina A.E.; Naguib, Aymen; Joy, Marcus T.; Emam, Hany A.; Case Report: Extraction of Wisdom Teeth For a Patient with Becker's Muscular Dystrophy and a Left Ventricular Assist Device. 2020

POSTERS, ABSTRACTS AND FULL PAPERS

- Cornelius BW, Dib SO, Dowdy RA, Horton CK, Frimenko K, Mansour S, Sharkh FA, Joy MT, Hall DL, Emam HA, Jatana CA, Kennedy KS. Malignant Hyperthermia: A Case Study in the Dental Ambulatory Surgery Setting. Anesthesia Progress. 2019 Winter;66(4):202-210.
- Abul K. Azad, Murugesan V.S. Rajaram, Wendy L. Metz, Frederick O. Cope, Richard D. Hartman, Marcus T. Joy, Beth M. Potter, Bonnie C. Abbruzzese, Michael S. Blue, Larry S. Schlesinger. Evaluation of human mannose receptor (CD206) binding of Tc 99m tilmanocept: A novel bio-targeted sentinel node mapping agent for solid tumors. Presented at: The Ninth AACR-Japanese Cancer Association Joint Conference: Breakthroughs in Basic and Translational Cancer Research; Feb 21-25, 2013; Maui, HI.
- 3. Abul K. Azad, Murugesan V.S. Rajaram, Wendy L. Metz, Frederick O. Cope, Richard D. Hartman, Marcus T. Joy, Beth M. Potter, Bonnie C. Abbruzzese, Michael S. Blue, Larry S. Schlesinger. Evaluation of human mannose receptor (CD206) binding of Tc 99m tilmanocept: A novel bio-targeted sentinel node mapping agent for solid tumors. Presented at: The American Association for Cancer Research and Society of Nuclear Medicine and Molecular Imaging Joint Conference on State-of-the-Art Molecular Imaging in Cancer Biology and Therapy; Feb 27-Mar 2, 2013; San Diego, CA.

- 4. Frederick O. Cope, Wendy L. Metz, Richard D. Hartman, Marcus T. Joy, Beth M. Potter, Bonnie C. Abbruzzese, Joanna L. Shuping, Michael S. Blue, Lori M. Christman, Dennis W. King. Tc 99m Tilmanocept and Sulfur Colloid Injection: A comparison of preoperative imaging and intraoperative lymphatic mapping of breast cancer patients Localization rate and degree of localization. Poster presented at: The 2012 CTRC-AACR San Antonio Breast Cancer Symposium; 2012 Dec 4-8; San Antonio, Texas.
- 5. Cope, Frederick O; Metz, Wendy L; Hartman, Richard D; Joy, Marcus T; Abbruzzese, Bonnie C; Potter, Beth M; Shuping, Joanna L; Christman, Lori; King, Dennis. In vitro binding characteristics of Tc 99m Tilmanocept translate to superior clinical performance at varying injection to surgery time intervals: false detection rates and sensitivities in breast cancer and melanoma patients. Poster presented at: The 24th EORTC-NCI-AACR Symposium on 'Molecular Targets and Cancer Therapeutics'; 2012 November 6-9; Dublin, Ireland.
- 6. Wendy Metz, Beth Potter, Richard D. Hartman, Marcus T. Joy, Jo Shuping, Lori Christman. Receptor Targeted (CD206) Tc 99m-labeled Tilmanocept Shows Superiority Over Colloidal Sentinel Node Mapping Agents When Utilized in Radio-Guided Lymphatic Mapping of Breast Cancer Patients: Patient Localization and Degree of Localization. Poster presented at: The 2012 UICC World Cancer Congress; 2012 Aug 27-30; Montreal, Canada.
- Frederick O. Cope, Michael Blue, Bonnie Abbruzzese, Marcus T. Joy, Richard Hartman, Dennis King. In Phase 3 Clinical Studies in Melanoma and Breast Cancer, Receptor-Targeted (CD206) Tc 99m Tilmanocept Provided Enhanced Intraoperative Lymphatic Mapping Leading To Increased Pathology Findings in Patients and Upstaging in Pathology-Positive Patients. Poster presented at: The 2012 UICC World Cancer Congress; 2012 Aug 27-30; Montreal, Canada.
- 8. Frederick O. Cope, Wendy Metz, Beth Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Peter Montgomery, Eimile Dougherty, Tomas Guerrero, Kiersten Pasternak, Thien Nguyen, Kristyn Sturms, Michael Blue, Lori Christman, Dennis King. A Phase 3 Clinical Trial Employing Tc 99m Tilmanocept, a Novel CD206-Targeted Intraoperative Lymphatic Mapping Agent For Breast Cancer and Melanoma, Shows Significant Concordance Between Preoperative Imaging and Intraoperative Localization of Disease Predictive Lymph Nodes. Poster presented at: The 98th Scientific Assembly and Annual Meeting of the Radiological Society of North America; 2012 Nov 25-30; Chicago, Ill.

- 9. Frederick O. Cope, Wendy Metz, Beth Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Peter Montgomery, Eimile Dougherty, Tomas Guerrero, Kiersten Pasternak, Thien Nguyen, Kristyn Sturms, Michael Blue, Lori Christman, Dennis King. In Phase 3 Clinical Studies in Melanoma and Breast Cancer, Receptor-Targeted (CD206) Tc 99m Tilmanocept Provided Enhanced Intraoperative Lymphatic Mapping Leading To Increased Pathology Findings in Patients and Upstaging in Pathology-Positive Patients. Poster presented at: The 98th Scientific Assembly and Annual Meeting of the Radiological Society of North America; 2012 Nov 25-30; Chicago, Ill.
- 10. Cope, FO; Metz, WL; Hartman, RD; Joy, MT; Abbruzzese, BC; Shuping, JL; Blue, MS; Potter, BM; Wallace, A; Vera, D; Agrawal, A; Lai, SY; Christman, L;King, D. Enhanced Sentinel Node Evaluation in Breast Cancer, Melanoma, and Head/Neck Squamous Cell Carcinoma Via CD206 Receptor Targeting with Tc 99m Tilmanocept. Poster presented at: The 22nd Biennial Congress of the European Association for Cancer Research; 2012 Jul 7-10; Barcelona, Spain.
- 11. Cope FO, Metz WL, Hartman RD, Joy MT, Abbruzzese BC, Shuping JL, Blue MS, Potter BM. Receptor targeted (CD206) Tc 99m Tilmanocept provides for enhanced long-term (>24 hr) stable signal localization in lymph nodes and equally stable concordance with early preoperative imaging in melanoma and breast cancer. Oral presentation at: The 2012 Society of Nuclear Medicine Annual Meeting; 2012 Jun 9-13; Miami, Fl.
- 12. W.L. Metz, F.O. Cope, R.D. Hartman, M.T. Joy, B.M. Potter, B.C. Abbruzzese, M.S. Blue, M.V.S. Rajaram, A.K. Azad, L.S. Schlesinger. Validation of Tc 99m tilmanocept binding to the mannose receptor (CD206) and its clinical utility. Poster presented at: The European Society for Radiotherapy and Oncology 4th Symposium on Novel Targeting Drugs and Radiotherapy; 2012 Sep 10-11; Toulouse, France.
- 13. F.O. Cope, W.L. Metz, R.D. Hartman, M.T. Joy, B.M. Potter, B.C. Abbruzzese, J.L. Shuping, M.S. Blue. Receptor targeted Tc 99m tilmanocept promotes more accurate staging of patients with breast cancer and melanoma. Oral presentation at: The European Society for Radiotherapy and Oncology 4th Symposium on Novel Targeting Drugs and Radiotherapy; 2012 Sep 10-11; Toulouse, France.
- 14. Wendy L. Metz, Frederick O. Cope, Richard D. Hartman, Marcus T. Joy, Beth M. Potter, Michael S. Blue, Bonnie C. Abbruzzese, Joanna L. Shuping, Eimile Dougherty, Tomas Guerrero, Peter E. Montgomery, Kiersten Pasternak, Thien Nguyen, Kristyn Sturms, Dennis King, Lori Christman. Sensitivities and False Negative Rates of Tc 99m Tilmanocept and Vital Blue Dye By Time Interval of Tc 99m Tilmanocept Injection to In Vivo Probing in Melanoma and Breast Cancer Patients Undergoing Intraoperative Lymphatic Mapping. Poster presented at: The American Association of Pharmaceutical Scientists 2012 Annual Meeting and Exposition; 2012 Oct 14-18; Chicago, Ill.

- 15. Frederick O. Cope, Wendy L. Metz, Richard D. Hartman, Marcus T. Joy, Beth M. Potter, Michael S. Blue, Bonnie C. Abbruzzese, Joanna L. Shuping, Eimile Dougherty, Tomas Guerrero, Peter E. Montgomery, Kiersten Pasternak, Thien Nguyen, Kristyn Sturms, Dennis King, Lori Christman. The Effect of Post-Injection Time Interval of Tc 99m Tilmanocept Injection to In Vivo Probing on Nodal Concordance Rates Relative to Vital Blue Dye in Melanoma and Breast Cancer Patients Undergoing Intraoperative Lymphatic Mapping. Poster presented at: The American Association of Pharmaceutical Scientists 2012 Annual Meeting and Exposition; 2012 Oct 14-18; Chicago, Ill.
- 16. Wendy L. Metz, Frederick O. Cope, Rajaram Murugesan, Abul Azad, Larry Schlesinger, Beth M. Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Michael Blue, Lori Christman, Dennis King. Estimation of the intrasurgical sentinel lymph node mapping performance parameters of 99mTctilmanocept in melanoma and other solid tumors utilizing in vitro modeling with a fluorescent Cy3-tilmanocept; alteration of mannose moiety configuration binding to human lymph node macrophages and the CD206 receptor. Hot Topics in Lymphology: 9th Australasian Lymphology Association Conference; 2012; 24-30.
- 17. Tokin CA, Cope FO, Metz WL, Blue MS, Potter BM, Abbruzzese BC, Hartman RD, Joy MT, King DW, Christman LA, Vera DR, Wallace AM. The efficacy of Tilmanocept in sentinel lymph mode mapping and identification in breast cancer patients: a comparative review and meta-analysis of the (99m)Tc-labeled nanocolloid human serum albumin standard of care. Clin Exp Metastasis. 2012 Jun 23. [Epub ahead of print] PubMed PMID: 22729510.
- 18. Fredrick O. Cope, Wendy L. Metz, Beth M. Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Michael Blue, Lori Christman, Dennis King. Phase 3 Trials Evaluating Biotargeted (CD206) Tc 99m Tilmanocept Against Vital Blue Dye (VBD) in the Detection of Lymph Nodes (LNs) in Breast Cancer (BC) Patients. Oral Presentation at: The Annual Congress of the European Association of Nuclear Medicine; 2012 Oct 27-31; Milan, Italy.
- 19. Michael Blue, Fredrick O. Cope, Wendy L. Metz, Beth M. Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Lori Christman, Dennis King. Clinical Performace of Tc 99m Tilmanocept Versus Vital Blue Dye (VBD) in the Detection of Lymph Nodes (LNs) in Melanoma Patients. Oral Presentation at: The Annual Congress of the European Association of Nuclear Medicine; 2012 Oct 27-31; Milan, Italy.

- 20. Frederick O. Cope, Wendy Metz, Beth Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Michael Blue, Lori Christman, Dennis King. Tc 99m tilmanocept (CD206 bio-targeted) shows superiority over colloidal agents when utilized in intraoperative lymphatic mapping of breast cancer patients in two key clinical performance characteristics (patient localization and degree of localization). Oral Presentation at: The 32nd Congress of The European Society of Surgical Oncology; 2012 Sep 19-21; Valencia, Spain.
- 21. Frederick O. Cope, Wendy Metz, Beth Potter, Richard D. Hartman, Marcus T. Joy, Bonnie Abbruzzese, Jo Shuping, Michael Blue, Lori Christman, Dennis King. Preoperative imaging is concordant with intraoperative sentinel node localization and a reduction in missed disease when utilizing receptor targeted (CD206) Tc 99m tilmanocept in breast cancer and melanoma patients. Poster presented at: The 32nd Congress of The European Society of Surgical Oncology; 2012 Sep 19-21; Valencia, Spain.
- 22. Cope, Frederick O.; Metz, Wendy L.; Hartman, Richard D.; Joy, Marcus T.; Abbruzzese, Bonnie; Shuping, Jo; Blue, Michael Potter, Beth; Christman, Lori; King, Dennis.Tc 99m Tilmanocept, A CD206 ILM Agent, Has > 24 Hour Stability In Nodes and Concordance With Imaging In Breast Cancer. Poster, presented at: The European Society for Radiotherapy and Oncology (ESTRO 31) meeting; 2012 May 9-13; Barcelona, Spain.
- 23. Cope, Frederick O.; Metz, Wendy L.; Hartman, Richard D.; Joy, Marcus T.; Abbruzzese, Bonnie; Shuping, Jo; Blue, Michael; Potter, Beth; Christman, Lori; King, Dennis. Correlation Of Lymphoscintigraphy With Intraoperative Lymphatic Mapping In Phase 3 Studies With Tc 99m-Tilmanocept In Breast Cancer & Melanoma. Poster, presented at: The European Society for Radiotherapy and Oncology (ESTRO 31) meeting; 2012 May 9-13; Barcelona, Spain.
- 24. Rich Metz W, Hall N, Povoski S, Agrawal A, Blackburn S, Abbruzzese BC, Hartman RD, Joy MT, Shuping J, Potter B, Cope FO. The Use of a Novel Receptor Targeted (CD206) 99mTc-Labeled Intraoperative Node Mapping Agent for Preoperative SPECT/CT Imaging in Head and Neck Cancer, Breast Cancer, and Melanoma; Localization and Concordance in Lymph Nodes. Poster presented at: The 103rd Annual Meeting of the American Association for Cancer Research; 2012 Mar 31-Apr 4; Chicago, IL.
- 25. Frederick O. Cope, Wendy Metz, Bonnie Abbruzzese, Jo Shuping, Richard D. Hartman, Marcus T. Joy, Dennis King, Lori Christman, Michael Blue. Receptor Targeted (CD206) Tc 99m Tilmanocept Localization in Sentinel Nodes in Breast Cancer & Melanoma is Concordant with Preoperative Imaging and Reduction in Missed Disease. Poster presented at: The 103rd Annual Meeting of the American Association for Cancer Research; 2012 Mar 31-Apr 4; Chicago, IL.

- 26. Raharam MVS, Azad AK, Hartman RD, Vollman VM, Abbruzzese BC, Blackburn SA, Bosold JM, Chen L-S, Hinkle GH, Joy MT, Rich Metz WL, Moore NA, Nandani H, Oser MK, Potter BM, Shuping JL, Terry JD, Orahood RC, Schlesinger LS, Cope FO. Binding Validation of 99mTc-Tilmanocept to the Mannose Receptor (CD206) and Potential Impact on Drug Performance. Poster presented at: The American Association of Pharmaceutical Scientists 2011 Annual Meeting and Exposition; 2011 Oct 23-27; Washington D.C. AAPS Journal. 2011; 13(S2).
- 27. Cope FO, Azad AK, Rajaram MVS, Schlesinger LS, Hartman RD, Bosold JM, Terry JD, Oser MK, Chen L-S, Joy MT, Rich Metz WL, Blackburn SA, Abbruzzese BC, Moore NA, Nandani HA, Vollman VM, Hinkle GH, Phelps AM, Orahood RC. Tilmanocept: a novel biotargeted agent for enhanced intraoperative discrimination of lymph nodes in breast cancer, melanoma, and head & neck SCC. Poster presented at: Basis for rational therapy. 4th International Symposium on Cancer Metastasis & the Lymphovascular System; 2011 May 12-14; New York City.
- 28. Cope FO, Rich Metz WL, Blackburn SA, Abbruzzese BC, Terry JD, Oser MK, Chen L-S, Hartman RD, Bosold JM, Joy MT, Moore NA, Nandani HA, Vollman VM, Hinkle GH, Phelps AM, Wallace AM, Sondak VK, Orahood RC. Tilmanocept: A Novel Biotargeted Agent For Enhanced Intraoperative Discrimination Of Lymph Nodes In Breast Cancer, Melanoma, And Head & Neck SCC. Poster Presented at: The 102nd Annual Meeting of the American Association for Cancer Research; 2011 Apr 2-6; Orlando, FL.
- 29. Azad AK, Rajaram MVS, Terry JD, Bosold JM, Abbruzzese BC, Blackburn SA, Chen L-S, Hartman RD, Hinkle GH, Joy MT, Rich Metz WL, Moore NA, Nandani H, Oser MK, Potter BM, Shuping JL, Vollman VM, Orahood RC, Schlesinger LS, Cope FO. Evaluation of the Binding Kinetics of Cy3-Tilmanocept to Human Macrophages and Impact on Drug Performance. Poster, presented at the American Association of Pharmaceutical Scientists 2011 Annual Meeting and Exposition; 2011 Oct 23-27; Washington D.C.
- 30. F.O. Cope, D.R. Vera, A.M. Wallace, V.K. Sondak, M.K. Oser, J.D. Terry, R.D. Hartman, L-S Chen, J.M. Bosold, M.T. Joy, S.A. Blackburn, W.L. Rich Metz, B.C. Abbruzzese, A.M. Phelps, G.H. Hinkle, R.C. Orahood. A novel bio-receptor targeted 99mTc-molecule for intraoperative lymphatic mapping in solid tumors: binding and clinical performance. Proceedings of the International Symposium on Technetium and Other Radiometals in Chemistry and Medicine (2010): 507-512.