# CURRICULUM VITAE

Christopher J. Tien, PhD, DABR

Version Date: 1/26/2023

## **Contact Information:**

Address:	Yale School of Medicine
	20 York St NPLL RAD ONC #69
Phone:	1 (203) 688-4254
Email:	christopher.tien@yale.edu

School: Yale School of Medicine

#### Education:

09/2003 - 04/2007	BS, University of Michigan, Nuclear Engineering and Radiological Sciences, Ann
	Arbor, MI
09/2007 - 04/2008	MS, University of Michigan, Nuclear Engineering and Radiological Sciences, Ann Arbor, MI
08/2008 - 08/2011	PhD, University of Florida, Medical Physics, Gainesville, FL

## Career/Academic Appointments:

07/2011 - 06/2013	Medical Physics Resident, Medical Physics, Brown University (Warren Alpert
	Medical School), Providence, RI
06/2016 - 03/2018	Medical Physicist I, Radiation Oncology, Yale-New Haven Hospital, New Haven, CT
11/2016 - 06/2019	Assistant Clinical Professor, Therapeutic Radiology, Yale School of Medicine, New
	Haven, CT
03/2018 - Present	Medical Physicist II, Radiation Oncology, Yale-New Haven Hospital, New Haven, CT
07/2019 - 06/2023	Assistant Professor, Therapeutic Radiology, Yale School of Medicine, New Haven,
	СТ

### Administrative Positions:

08/2022 - Present Lead Physicist for Brachytherapy, Therapeutic Radiology, Yale School of Medicine, New Haven, CT

### **Board Certification:**

2014 - 2024	American Board of Radiology, Therapeutic Radiology
-------------	--

## Professional Honors & Recognition:

#### International/National/Regional

	•	, 6
01/2011		Best Medical Physics Graduate Student, American College of Medical Physics
06/2018		Judith Stitt Award for Best physics abstract (of 300+ submissions), American
		Brachytherapy Society
06/2018		Plenary invited speaker at Annual National Meeting, American Brachytherapy
		Society
12/2019		Editor's Recognition Award as Outstanding Reviewer, Brachytherapy (Journal
		award)

## Grants/Clinical Trials History:

Current Grants	
Agency:	American Cancer Society
I.D.#:	IRG 17-172-57
Title:	Characterization of a novel brachytherapy applicator with dynamic shielding for
	radiation therapy in cervical cancer
P.I.:	Christopher J. Tien
Role:	Principle Investigator
Percent effort:	N/A
Direct costs per year:	\$40,000.00
Total costs for project	
period:	\$40,000.00
Project period:	1/1/2023 - 12/31/2023

# Invited Speaking Engagements, Presentations, Symposia & Workshops

### Not Affiliated With Yale:

### International/National

- "Plenary Session: Early Experience with Brachytherapy Model-Based Dose Calculation Algorithm: Commissioning and Retrospective Comparison with Historical Template", Plenary Session: Early Experience with Brachytherapy Model-Based Dose Calculation Algorithm: Commissioning and Retrospective Comparison with Historical Template, American Brachytherapy Society, San Francisco, CA, United States, January 2018 (Oral Presentation)
- 2. "The impact of model-based dose calculation algorithms on clinical brachytherapy", The impact of model-based dose calculation algorithms on clinical brachytherapy, New England AAPM Chapter, AAPM, Nashua, NH, United States, January 2019 (Oral Presentation)
- "Grid-Based Boltzmann Solver for Dose Transport in Gynecological Brachytherapy Medical Application", Grid-Based Boltzmann Solver for Dose Transport in Gynecological Brachytherapy Medical Application, Ken and Mary Alice Lindquist Department of Nuclear Engineering at Pennsylvania State University, State College, PA, United States, January 2021 (Lecture)
- 4. "Single-Institution Experience with Implementation of Varian Multi-channel Applicator", Varian Medical Systems User's Meeting at ASTRO 2021, Varian Medical Systems, Chicago, IL, United States, October 2021 (Oral Presentation)

- 5. "Practical Considerations for the Clinical Physicist (Moderator)", American Association of Physicists in Medicine Spring Clinical Meeting, American Association of Physicists in Medicine, New Orleans, LA, United States, March 2022 (Oral Presentation)
- 6. "Let's Get Practical: Advice for the Brachytherapy Physicist (Moderator)", Let's Get Practical: Advice for the Brachytherapy Physicist (Moderator), American Brachytherapy Society, Denver, CO, United States, June 2022 (Oral Presentation)

### Regional

 "Clinical surface brachytherapy: A primer on applicators, dose calculations, and case studies", Clinical surface brachytherapy: A primer on applicators, dose calculations, and case studies, Connecticut Area Medical Physics Society, AAPM, Hartford, CT, United States, January 2019 (Oral Presentation)

### Peer-Reviewed Presentations & Symposia Given at Meetings Not Affiliated With Yale:

#### International/National

- "HDR Monotherapy In Prostate Cancer: Radiobiological Considerations When Determining Biologically Effective Dose in Clinical Trials", HDR Monotherapy In Prostate Cancer: Radiobiological Considerations When Determining Biologically Effective Dose in Clinical Trials, American Brachytherapy Society, Boston, MA, United States, January 2017 (Oral Presentation)
- "Assessment of MR compatibility of novel needle placement template and collets for intraperitoneal interstitial gynecological brachytherapy application", Assessment of MR compatibility of novel needle placement template and collets for intraperitoneal interstitial gynecological brachytherapy application, Radiological Society of North America, Chicago, IL, United States, January 2018 (Oral Presentation)
- 3. "The Theoretical Benefits of a 15 Ci Ir-192 Source for HDR Brachytherapy", The Theoretical Benefits of a 15 Ci Ir-192 Source for HDR Brachytherapy., American Brachytherapy Society, Miami, FL, United States, January 2019 (Oral Presentation)
- "Feasibility of Using Multiple Positions in Leipzig Applicator to Increase Target Coverage", Feasibility of Using Multiple Positions in Leipzig Applicator to Increase Target Coverage, American Brachytherapy Society, Miami, FL, United States, January 2019 (Oral Presentation)
- "Single-Channel Cylinders with Metal Stems: Considerations in Brachytherapy Dose Reporting to Clinical Trials", Single-Channel Cylinders with Metal Stems: Considerations in Brachytherapy Dose Reporting to Clinical Trials, American Brachytherapy Society, Virtual, January 2021 (Oral Presentation)
- 6. "Utilizing Tumor Control Probability to Aid in Selection of Multi-Dwell or Single-Dwell Methodology for Leipzig-Style Applicators: A Preliminary Study", Utilizing Tumor Control Probability to Aid in Selection of Multi-Dwell or Single-Dwell Methodology for Leipzig-Style Applicators: A Preliminary Study, American Brachytherapy Society, Virtual, January 2021 (Oral Presentation)
- 7. "A Novel Gamma Camera-Based System for Real-Time Visualization of 192Ir Source Position in High Dose Rate Brachytherapy", A Novel Gamma Camera-Based System for Real-Time Visualization of 192Ir Source Position in High Dose Rate Brachytherapy, American Brachytherapy Society, Virtual, January 2021 (Oral Presentation)

- 8. "Single implant hybrid interstitial brachytherapy for cervical cancer during the COVID-19 pandemic: An institutional approach", Single implant hybrid interstitial brachytherapy for cervical cancer during the COVID-19 pandemic: An institutional approach, American Brachytherapy Society, Virtual, January 2021 (Oral Presentation)
- 9. "Investigating The Implications Of A Newly-available Higher Initial Source Strength For Ultrahypofractionated High-dose-rate 192Ir Brachytherapy In Prostate Monotherapy", Investigating The Implications Of A Newly-available Higher Initial Source Strength For Ultrahypofractionated High-dose-rate 192Ir Brachytherapy In Prostate Monotherapy, American Brachytherapy Society, Denver, CO, United States, June 2022 (Oral Presentation)
- 10. "Automated Channel Identification For Efficient Brachytherapy Treatment Planning", Automated Channel Identification For Efficient Brachytherapy Treatment Planning, American Brachytherapy Society, Denver, CO, United States, June 2022 (Oral Presentation)
- 11. "Investigating The Efficacy Of Simulation-Based Education For Interstitial Gynecologic Brachytherapy Using A Novel US/MR/CT-Compatible Gynecologic Phantom", Investigating The Efficacy Of Simulation-Based Education For Interstitial Gynecologic Brachytherapy Using A Novel US/MR/CT-Compatible Gynecologic Phantom, American Brachytherapy Society, Denver, CO, United States, June 2022 (Oral Presentation)
- "The Effect Of Quantum Noise On A Novel Multilateration-based Brachytherapy Source Localization Approach", The Effect Of Quantum Noise On A Novel Multilateration-based Brachytherapy Source Localization Approach, American Brachytherapy Society, Denver, CO, United States, June 2022 (Oral Presentation)
- 13. "The Impact Of Sublethal Damage Repair On Biological Dose For A Stepping-source Brachytherapy Delivery In A Single-fraction Prostate Treatment", The Impact Of Sublethal Damage Repair On Biological Dose For A Stepping-source Brachytherapy Delivery In A Single-fraction Prostate Treatment, American Brachytherapy Society, Denver, CO, United States, June 2022 (Oral Presentation)
- "Review of Radiobiological Considerations in Ultrahypofractionated High-Dose-Rate 192Ir Prostate Brachytherapy", Review of Radiobiological Considerations in Ultrahypofractionated High-Dose-Rate 192Ir Prostate Brachytherapy, Mid-Atlantic Chapter of the AAPM 2022 Annual Meeting, Annapolis, MD, United States, September 2022 (Oral Presentation)
- 15. "A New Era of Physics in Gynecological Brachytherapy: Single-Channels Are Not Enough: Part I. Multichannel Vaginal Cylinders", A New Era of Physics in Gynecological Brachytherapy: Single-Channels Are Not Enough: Part I. Multichannel Vaginal Cylinders, Mid-Atlantic Chapter of the AAPM 2022 Annual Meeting, Annapolis, MD, United States, September 2022 (Oral Presentation)
- 16. "A New Era of Physics in Gynecological Brachytherapy: Single-Channels Are Not Enough: Part II. Vienna/Vienna-style Intracavitary-Interstitial Caps", A New Era of Physics in Gynecological Brachytherapy: Single-Channels Are Not Enough: Part II. Vienna/Vienna-style Intracavitary-Interstitial Caps, Mid-Atlantic Chapter of the AAPM 2022 Annual Meeting, Annapolis, MD, United States, September 2022 (Oral Presentation)

# Professional Service:

## Peer Review Groups/Grant Study Sections

External Reviewer, City College of New York and Memorial Sloan-Kettering Cancer
Center Partnership for Cancer Research, Research Education and Community
Outreach Award for Pilot Projects
Reviewer, American Association of Physicists in Medicine Task Group 317:
Catheter, Needle, and Applicator Tracking Technology in Brachytherapy
Grant Reviewer, Canada National Foundation for Innovation's 2023 Innovation
Fund competition

## Advisory Boards

2020 - 2022	Scientific Advisor, Galaxy RTi dosimetric evaluation and testing, Akesis
2021 - 2022	Scientific Advisor, Gynecological brachytherapy trainer phantom clinical
	evaluation, VIOMERSE
2021 - Present	Scientific Advisor, HDR-Vue radiation monitoring system clinical evaluation and
	testing, Mirion Technologies, Inc.

## Journal Services

Reviewer	
2010 - Present	Reviewer, Medical Physics
2010 - Present	Reviewer, Journal of Applied Clinical Medical Physics
2012 - Present	Reviewer, Physics in Medicine and Biology
2014 - Present	Reviewer, Frontiers in Oncology: Radiation Oncology
2017 - Present	Reviewer, Brachytherapy
2018 - Present	Reviewer, International Journal of Radiation Oncology, Biology, Physics
2021 - Present	Reviewer, Journal of Contemporary Brachytherapy
2022	Reviewer, Physical and Engineering Sciences in Medicine

# Professional Organizations

## American Association of Physicists in Medicine (AAPM): National Level

2012 - 2013	Participant, American Association of Physicists in Medicine (AAPM): National
	Level, AAPM Task Group (TG) 180: Image Guidance Doses Delivered During
	Radiotherapy: Quantification, Management, and Reduction
2019 - Present	Reviewer, American Association of Physicists in Medicine (AAPM): National Level
2020 - Present	Committee Member, American Association of Physicists in Medicine (AAPM):
	National Level, Radiation Oncology Medical Physics Education Subcommittee
2021 - Present	Board of Directors, American Association of Physicists in Medicine (AAPM):
	National Level
2021 - Present	Committee Member, American Association of Physicists in Medicine (AAPM):
	National Level, National Brachytherapy Subcommittee
2022 - Present	Committee Member, American Association of Physicists in Medicine (AAPM):
	National Level, Work Group on Radiation Dosimetry

2022 - Present	Committee Member, American Association of Physicists in Medicine (AAPM):
	National Level, Working Group on Medical Errors in Brachytherapy
2022 - Present	Committee Member, American Association of Physicists in Medicine (AAPM):
	National Level, Task Group/ Medical Physics Practice Guidelines for
	Brachytherapy: an update to AAPM TG-56
2023 - Present	Committee Member, American Association of Physicists in Medicine (AAPM):
	National Level, Education and Training of Medical Physicists

#### American Association of Physicists in Medicine (AAPM): Regional Level

2012 - 2013	Board Member, American Association of Physicists in Medicine (AAPM): Regional
	Level, New England Chapter AAPM (NEAAPM)
2017 - 2019	Board Member, American Association of Physicists in Medicine (AAPM): Regional
	Level, Connecticut Area Medical Physics Society (CAMPS)
2018	President, American Association of Physicists in Medicine (AAPM): Regional Level,
	Connecticut Area Medical Physics Society (CAMPS)
2019	Immediate Past President, American Association of Physicists in Medicine
	(AAPM): Regional Level
2020 - Present	Social Media Consultant, American Association of Physicists in Medicine (AAPM):
	Regional Level
2021 - Present	Board Member, American Association of Physicists in Medicine (AAPM): Regional
	Level, Connecticut Area Medical Physics Society (CAMPS)
2021 - Present	Representative, American Association of Physicists in Medicine (AAPM): Regional
	Level

#### American Brachytherapy Society (ABS)

2021 - Present	Reviewer, American Brachytherapy Society (ABS)
2022 - Present	Member, American Brachytherapy Society (ABS), National Education Committee -
	Physics section
2022 - Present	Committee Member, American Brachytherapy Society (ABS), Education and
	Training Council
2022 - Present	Committee Member, American Brachytherapy Society (ABS), Skin Brachytherapy
	Subcommittee of Education Council
2023 - Present	Committee Member, American Brachytherapy Society (ABS), Research and
	Technology Development Council

#### American Society of Radiation Oncology (ASTRO)

2021 - Present Reviewer, American Society of Radiation Oncology (ASTRO)

## Yale University / Hospital System

# University

2018 - Present Member, Yale Cancer Center: Radiobiology and Genome Integrity Division

<i>Medical School</i> 2016 - Present 2016 - 2018 2016 - 2019 2017 - Present	Mentor, Medical Physics Residency Program: Brachytherapy Rotation Mentor, Medical Physics Residency Program: CT Simulation Rotation Mentor, Medical Physics Residency Program: Special Topics Rotation - Gamma Knife Member, Medical Physics Residency Program Admissions Committee
2019 - Present	Member, Medical Physics Residency Program Steering Committee
Downstein out	
Department	
2016 - Present	Instructor, Physics of Radiation Therapy for Resident Physicians: Radiation Measurements and Calibration section
2016 - Present	Representative, Department Brachytherapy Committee: Physics Division
2019	Lead, APEx Initial Accreditation Preparation Committee: Brachytherapy Division of Physics
2022 - 2023	Lead, APEx Reaccreditation Preparation Committee: Brachytherapy Division of Physics
Hospital	
2022	Member, Medical Equipment Sterilization Committee (in Preparation for Joint Commission)

### Patents:

#### Pending

1. **Tien J. Christopher**, David Brotman, Zhe (Jay) Chen. 2019. Virtually Reconstructed Ring Concept and Applicator Device. United States US 62/789,364, filed January 07, 2019. Patent Pending.

### **Bibliography:**

#### Peer-Reviewed Original Research

- 1. **Tien C**, Winslow J, Hintenlang D. SU-FF-I-08: Ramping and Overscanning Contributions to Patient Dose in Helical CT Medical Physics 2009, 36: 2435-2436. DOI: 10.1118/1.3181127.
- Winslow J, Hyer D, Fisher R, Tien C, Hintenlang D. Construction of anthropomorphic phantoms for use in dosimetry studies Journal Of Applied Clinical Medical Physics 2009, 10: 195-204. <u>PMID:</u> 19692982, <u>PMCID: PMC5720556</u>, <u>DOI: 10.1120/jacmp.v10i3.2986</u>.
- Lee C, Kim KP, Long D, Fisher R, Tien C, Simon SL, Bouville A, Bolch WE. Organ doses for reference adult male and female undergoing computed tomography estimated by Monte Carlo simulations. Medical Physics 2011, 38: 1196-206. <u>PMID: 21520832</u>, <u>PMCID: PMC3055697</u>, <u>DOI:</u> <u>10.1118/1.3544658</u>.
- 4. Winslow JF, **Tien CJ**, Hintenlang DE. Organ dose and inherent uncertainty in helical CT dosimetry due to quasiperiodic dose distributions Medical Physics 2011, 38: 3177-3185. <u>PMID: 21815392</u>, <u>DOI: 10.1118/1.3590367</u>.

- Tien C, Cantley J, Hintenlang D, Bolch W, Firpo M, Chell E. SU-E-T-204: Real-Time Monitoring of Age-Related Macular Degeneration Radiosurgery Using Plastic Scintillation Dosimetry Medical Physics 2011, 38: 3533-3533. DOI: 10.1118/1.3612154.
- Lee S, Tien C, Curran B, Sternick E. SU-E-T-176: Improved Collimator Scattering Factor (Sc) Measurements for Small Fields Using Build-Up Caps in Robotic Radiosurgery Medical Physics 2012, 39: 3743-3743. <u>PMID: 28517848</u>, <u>DOI: 10.1118/1.4735235</u>.
- Tien C, Hiatt J, Curran B, Sternick E. SU-E-T-312: Optically Stimulated Luminescent Dosimeter Performance in High Dose Rate Brachytherapy Medical Physics 2012, 39: 3775-3775. <u>PMID:</u> 28517245, DOI: 10.1118/1.4735398.
- Tien C, Dieterich S, Lee S, Curran B, Sternick E. SU-E-J-24: Imaging Dose Dependence On Fractionation Scheme and Tracking Method in CyberKnife Robotic Radiosurgery Medical Physics 2013, 40: 154-154. <u>DOI: 10.1118/1.4814236</u>.
- Lee S, Tien C, Curran B, Jang S, Sternick E. SU-E-T-115: Collimator Scatter Factor (Sc) Measurements for IRIS in CyberKnife Using Build-Up Caps Medical Physics 2013, 40: 230-230. DOI: <u>10.1118/1.4814550</u>.
- Tien C, Liu F, Curran B, Sternick E. SU-E-T-144: A Novel Phantom for Verifying Patient Orientation Integrity in Radiation Oncology Treatment Planning Medical Physics 2013, 40: 237-237. DOI: 10.1118/1.4814579.
- 11. Mihaylov I, **Tien C**, Hepel J. SU-E-T-438: Dosimetric Effect of Patient Arm Position in Spinal CyberKnife Robotic Radiosurgery Medical Physics 2013, 40: 306-306. <u>DOI: 10.1118/1.4814872</u>.
- Zhung J, Tien C, Hiatt J, DiPetrillo T. Does Rectal Distention Affect Interfractional Dose to Prostate and Rectum in Prostate IMRT Treatment?: Optimizing IGRT Techniques International Journal Of Radiation Oncology • Biology • Physics 2013, 87: s721. DOI: 10.1016/j.ijrobp.2013.06.1910.
- Savir G, Rava P, Tien C, Hiatt J, Kinsella T, DiPetrillo T, Wazer D, Hepel J. Experience Using Fractionated Stereotactic Radiosurgery to Treat Large CNS Metastases International Journal Of Radiation Oncology • Biology • Physics 2013, 87: s283. DOI: 10.1016/j.ijrobp.2013.06.739.
- Tien C, Yedavalli R. Clinical Significance of Different Contouring Software on Formalism-Based Y-90 Dose Prescriptions International Journal Of Radiation Oncology • Biology • Physics 2016, 96: e647. DOI: 10.1016/j.ijrobp.2016.06.2248.
- Tien C, Carlson D, Nath R, Chen Z. HDR Monotherapy in Prostate Cancer: Radiobiological Considerations When Determining Biologically Effective Dose in Clinical Trials Brachytherapy 2017, 16: s31. DOI: 10.1016/j.brachy.2017.04.038.
- Tien C, Butkus M, Stahl J, Qian J, Chen Z, Damast S. Does Variable 192Ir Dose Rate Affect Vaginal Toxicity in High-Dose-Rate Brachytherapy? Brachytherapy 2017, 16: s76-s77. DOI: 10.1016/j.brachy.2017.04.139.
- Tien C, Chen Z, Carlson D. High-Dose-Rate Brachytherapy As Monotherapy for Prostate Cancer: A Meta-analysis of Biochemical Control Rates and Dose Fractionation International Journal Of Radiation Oncology • Biology • Physics 2017, 99: e621. DOI: 10.1016/j.ijrobp.2017.06.2099.
- 18. Petrongolo M, **Tien C**, Chen Z. Dosimetric Implications of Air within Channels of Brachytherapy Applicators Brachytherapy 2018, 17: s127. <u>DOI: 10.1016/j.brachy.2018.04.235</u>.
- 19. **Tien C**, Chen Z. Ion Chamber-Based Quantification Oo Intra-lumen Source Sag in Varian Leipzigstyle Cone with Gammamedplus-iX Afterloader Brachytherapy 2018, 17: s130-s131. DOI: 10.1016/j.brachy.2018.04.242.

- Tien C, Chen Z. Assessment of Absolute Dose Rate in Tungsten-Shielded Applicators for High-Dose-Rate Brachytherapy: Comparing Results Between Advanced Dose Calculation Methodologies and Physical Measurements International Journal Of Radiation Oncology • Biology • Physics 2018, 102: e501. DOI: 10.1016/j.ijrobp.2018.07.1422.
- Yu J, Singh C, Bindra R, Contessa J, Husain Z, Hansen J, Park H, Roberts K, Bond J, Tien C, Guo F, Colaco R, Housri N, Magnuson W, Omay B, Chiang V. A Pilot/Phase II Study of Stereotactic Radiosurgery for Brain Metastases Using Rational Dose Selection International Journal Of Radiation Oncology • Biology • Physics 2018, 102: e372-e373. DOI: 10.1016/j.ijrobp.2018.07.1113.
- Yu J, Singh C, Bindra R, Contessa J, Husain Z, Hansen J, Park H, Roberts K, Bond J, Tien C, Guo F, Colaco R, Housri N, Magnuson W, Mahajan A, Omay S, Chiang V. Results of a pilot/phase II study of gamma knife radiosurgery for brain metastases and implications for future prospective clinical trials Journal Of Radiation Oncology 2019, 8: 39-46. <u>DOI: 10.1007/s13566-018-0370-7</u>.
- 23. **Tien C**, Chen Z. Feasibility of Using Multiple Positions in Leipzig Applicator to Increase Target Coverage Brachytherapy 2019, 18: s27-s28. DOI: 10.1016/j.brachy.2019.04.060.
- 24. **Tien C**, Chen Z. Producing Optimal Dose Distributions with a Novel "Virtual Ring" Applicator Design Brachytherapy 2019, 18: s109-s110. DOI: 10.1016/j.brachy.2019.04.238.
- 25. Kassick M, Gao S, Park H, Kelly J, Young M, **Tien C**, Damast S. Does Use of Bowel Prep Improve HDR Cervix Implant Dosimetry? International Journal Of Radiation Oncology Biology Physics 2019, 105: e324. DOI: 10.1016/j.ijrobp.2019.06.1808.
- Draeger E, Pinkham D, Chen Z, Tien C. Strategies to Expand Viable Treatment Area in Tungsten Shell Applicators for Surface Brachytherapy International Journal Of Radiation Oncology • Biology • Physics 2020, 108: e339. DOI: 10.1016/j.ijrobp.2020.07.809.
- Kassick M, Gao S, Qian J, Tien C, Damast S. Evaluating Clinical Outcomes in 3D vs. 2D Vaginal Brachytherapy International Journal Of Radiation Oncology • Biology • Physics 2020, 108: e493e494. DOI: 10.1016/j.ijrobp.2020.07.1562.
- Damast S, Tien C, Young M, Altwerger G, Ratner E. GSOR10 Presentation Time: 3:15 PM Single Implant Hybrid Interstitial Brachytherapy for Cervical Cancer during the COVID-19 Pandemic: An Institutional Approach Brachytherapy 2021, 20: s54. <u>PMCID: PMC8215885</u>, <u>DOI:</u> 10.1016/j.brachy.2021.06.086.
- 29. **Tien C**, Damast S, Young M, Kaur M, Kim J, Chen Z. PO03 A Novel Design in Peripheral Channels of a Brachytherapy Multichannel Applicator Demonstrates Significant Differences in Dose to Surrounding Volume Brachytherapy 2021, 20: s56-s57. <u>DOI: 10.1016/j.brachy.2021.06.091</u>.
- 30. **Tien C**, Damast S. PO27 A Dosimetric Comparison between Rounded-Tip vs Flat-Tip Multichannel Applicators for Recurrent Endometrial Cancer Involving Vaginal Apex Brachytherapy 2021, 20: s68-s69. <u>DOI: 10.1016/j.brachy.2021.06.115</u>.
- Draeger E, Decker R, Tien C. PHSOR11 Presentation Time: 10:50 AM Utilizing Tumor Control Probability to Aid in Selection of Multi-Dwell or Single-Dwell Methodology for Leipzig-Style Applicators: A Preliminary Study Brachytherapy 2021, 20: s28-s29. DOI: <u>10.1016/j.brachy.2021.06.037</u>.
- 32. **Tien C**. PHSOR04 Presentation Time: 10:15 AM Single-Channel Cylinders with Metal Stems: Considerations in Brachytherapy Dose Reporting to Clinical Trials Brachytherapy 2021, 20: s24-s25. DOI: 10.1016/j.brachy.2021.06.030.
- 33. Cifarelli C, Vargo J, Fang W, Liscak R, Guseynova K, Warnick R, Lee C, Yang H, Borghei-Razavi H, Maiti T, Siddiqui Z, Yuan J, Grills I, Mathieu D, Touchette C, Cordeiro D, Chiang V, Hess J, **Tien C**,

Faramand A, Kano H, Barnett G, Sheehan J, Lunsford L. Role of Gamma Knife Radiosurgery in Small Cell Lung Cancer: A Multi-Institutional Retrospective Study of the International Radiosurgery Research Foundation (IRRF) Neurosurgery 2021, 89: s20-s20. <u>DOI: 10.1093/neuros/nyz428\_s020</u>.

- 34. **Tien CJ**, Damast S, Chen ZJ. Dosimetric study of Varian Universal Multi-Channel Cylinder System for High-Dose-Rate 192Ir Brachytherapy Brachytherapy 2022, 21: 244-254. <u>PMID: 34996715</u>, <u>DOI:</u> <u>10.1016/j.brachy.2021.11.001</u>.
- Damast S, Tien CJ, Young M, Altwerger G, Ratner E. Single application hybrid interstitial brachytherapy for cervical cancer: an institutional approach during the COVID-19 pandemic Journal Of Contemporary Brachytherapy 2022, 14: 66-71. <u>PMID: 35233237</u>, <u>PMCID: PMC8867238</u>, <u>DOI:</u> <u>10.5114/jcb.2022.113058</u>.
- Tien C, Li J, Kassick M, Peters G, Damast S. PO17 Assessment of a Prototype Gynecologic US/MR/CT Phantom for Utilization in Interstitial Brachytherapy Training Brachytherapy 2022, 21: s79. <u>DOI:</u> <u>10.1016/j.brachy.2022.09.123</u>.
- Li J, Tien C, Kassick M, Peters G, Damast S. GPP07 Presentation Time: 9:40 AM Investigating the Efficacy of Simulation-Based Education for Interstitial Gynecologic Brachytherapy Using a Novel US/MR/CT-Compatible Gynecologic Phantom Brachytherapy 2022, 21: s38. DOI: <u>10.1016/j.brachy.2022.09.044</u>.
- Jensen P, Tien C, Chen Z. PHSOR05 Presentation Time: 12:50 PM The Effect of Quantum Noise on a Novel Multilateration-Based Brachytherapy Source Localization Approach Brachytherapy 2022, 21: s25-s26. DOI: 10.1016/j.brachy.2022.09.023.
- 39. **Tien C**, Donahue W, Giles D, Chen Z. PHSPP04 Presentation Time: 3:00 PM The Impact of Sublethal Damage Repair on Biological Dose for a Stepping-Source Brachytherapy Delivery in a Single-Fraction Prostate Treatment Brachytherapy 2022, 21: s32-s33. DOI: 10.1016/j.brachy.2022.09.034.
- 40. Li J, **Tien C**, Kassick M, Peters G, Damast S. Implementing a simulation-based curriculum for hybrid intracavitary/interstitial brachytherapy using a new, commercially available, US/MR/CT-compatible gynecologic phantom Brachytherapy 2022 <u>PMID: 36528476</u>, <u>DOI: 10.1016/j.brachy.2022.11.006</u>.
- 41. Draeger E, Chen ZJ, Hansen JE, Chiang V, Tien CJ. Preliminary dosimetric comparison between fixed and rotating source stereotactic radiosurgery systems. J Appl Clin Med Phys 2023, e13907. <u>PMID:</u> <u>36660774</u>, DOI: 10.1002/acm2.13907.

### Commentaries, Editorials and Letters

 CJ Tien, E Draeger, DW Pinkham, DJ Carlson, Z Chen. Letter to the Editor with regards to "Impact of detector selection on commissioning of Leipzig surface applicators with improving immobilization in high-dose-rate brachytherapy" by Li et al. Brachytherapy. E-pub ahead of print. DOI: https://doi.org/10.1016/j.brachy.2022.11.004