CURRICULUM VITAE

AUGUST 2, 2022

PERSONAL INFORMATION

Chen, Po-Hao

Education

School: Duke University

Degree: B.S.

Dates: 8/2003 - 5/2007

School: Harvard Medical School

Degree: M.D.

Dates: 8/2007 – 5/2012

School: Harvard Business School

Degree: M.B.A.

Dates: 8/2010 – 5/2012

Post-Graduate Training

Institution: Temple University Hospital

Position: Preliminary Intern, Internal Medicine

Dates: 6/20/2012 - 6/30/2013

Institution: Hospital of the University of Pennsylvania

Position: Resident, Diagnostic Radiology and Nuclear Medicine

Dates: 7/1/2013 - 6/30/2017

Institution: Hospital of the University of Pennsylvania Position: Fellow, Clinical Imaging Informatics

Dates: 7/1/2017 - 6/30/2018

Institution: Hospital of the University of Pennsylvania

Position: Fellow, Musculoskeletal Imaging

Dates: 7/1/2017 - 6/30/2018

PROFESSIONAL APPOINTMENTS

Position/Rank: Staff Radiologist

Institution: Cleveland Clinic Main Campus

Institute: Imaging Institute

Department: Musculoskeletal Imaging Section

Dates: 9/1/2018 – Present

Position/Rank: Associate Imaging Informatics Officer

Institution: Cleveland Clinic Main Campus

Institute: Imaging Institute
Department: Informatics

Dates: 9/1/2018 – 12/31/2020

Position/Rank: Chief Imaging Informatics Officer

Institution: Cleveland Clinic Main Campus
Institute: Imaging Institute

Department: Informatics

Dates: 1/1/2021 – Present

Position/Rank: Medical Director, Enterprise Radiology Informatics

Institution: Cleveland Clinic Main Campus
Department: Information Technology Division

Dates: 11/1/2019 – Present

Position/Rank: Assistant Professor

Institution: Case Western Reserve University
Institute: Lerner School of Medicine
Dates: 12/17/2019 – Present

CERTIFICATION AND LICENSURE

Name of Board: American Board of Radiology

Date of Certificate: 10/23/2018 Date Issued: 10/23/2018

Name of Board: American Board of Nuclear Medicine

Date of Certificate: 10/6/2018 Date Issued: 10/6/2018

Name of Board: Ohio State Medical Board

Date of Certificate: 3/14/2018 Licensure State/Number: Ohio/35.133247 Date Issued: 3/14/2018

HONORS AND AWARDS

- Raymond D. Lublin, MD award, Duke University, 5/2007.
- Imaging Informatics Open-Source Leadership Award, Society of Imaging Informatics in Medicine, 5/2014
- Quality Improvement Project Annual Award, Hospital of the University of Pennsylvania, 6/2016
- Radiology Leadership Institute Summit Scholarship, Pennsylvania Radiology Society, 3/2016
- 2nd Place Grand Prize Winner, Hackathon for Enterprise Image Capture and Viewing, Society of Imaging Informatics in Medicine Annual Conference, 7/2016
- Research Scholar Award, Association of University Radiologists, 5/2017
- New Investigator Travel Award, Society of Imaging Informatics in Medicine, 5/2017
- Quality Improvement Project Annual Award, Hospital of the University of Pennsylvania, 6/2017
- Baum-Laufer Excellence in Service to the Radiology Residency Award, Hospital of the University of Pennsylvania, 6/2017
- Educational Exhibit Award, Radiology Society of North America, 11/2017
- Finalist, Penn Center for Innovation Ventures "App It Up" Competition, (Proposal: Mobile platform to improve the quality of care in radiology through intelligent closed-loop feedback), 4/2017
- Phase II Awardee, Penn Health-Tech Grant Competition, (Proposal: Converting proof-of-concept dynamic MRI parameter adjustment deep learning algorithm to prototype), 2018
- New Investigator Award. Society of Imaging Informatics in Medicine, 6/2020
- 2nd Place Grand Prize Winner, Hackathon, Society of Imaging Informatics in Medicine Annual Conference, 6/2021
- 2021 Reviewer Award with Distinction, Skeletal Radiology

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Member, Society of Imaging Informatics in Medicine 2013 Present
- SPIE Medical Imaging: Imaging Informatics for Healthcare, Research, and Applications

- Conference Chair 2017 2020
- o Member, 2013 Present
- Vice President, American Alliance of Academic Chief Residents in Radiology, 2016 2017
- Member, Association of University Radiologists, 2013 Present
- Member, Society of Nuclear Medicine and Molecular Imaging, 2016 Present
- Member, Radiology Society of North America, 2013 Present
- Member, Pennsylvania Radiology Society, 2013 2018
- Member, American College of Radiology, 2014 Present.
- Member, Society of Skeletal Radiology, 2018 Present
- Member, American Medical Informatics Association, 2021

PROFESSIONAL SERVICES

Editorial Board

Journal: Journal of Medical Artificial Intelligence

Dates of Service: 2018 - Present

Co-Editor

Journal: Current Cardiology Reports Dates of Service: 2019 – 2020

Reviewer

Journal: Journal of American College of Radiology

Dates of Service: 2019 – Present

Reviewer

Journal: Journal of Digital Imaging Dates of Service: 2019 – Present

Editorial Advisory Group

American College of Radiology Bulletin

Dates of Service: 2020 – Present

Reviewer

Journal: Skeletal Radiology Dates of Service: 2021 – Present

COMMITTEE SERVICE

National

Organization: Association of University Radiologists Committee Name/Role: Educational Committee

Dates of Service: 2016 - 2017

Organization: Society of Imaging Informatics in Medicine Committee Name/Role: Program Steering Committee

Dates of Service: 2016 – 2018

Organization: Society of Imaging Informatics in Medicine

Committee Name/Role: Residents Fellows and Doctoral Students Committee / Chair

Dates of Service: 2017 – 2018

Organization: SPIE Medical Imaging: Imaging Informatics for Healthcare, Research, and Applications

Committee Name/Role: Conference Track Chair

Dates of Service: 2017 – 2020

Organization: Society of Imaging Informatics in Medicine

Committee Name/Role: Residents Fellows and Doctoral Students Committee / Past Chair (Advisory)

Dates of Service: 2018 – Present

Organization: Society of Imaging Informatics in Medicine Committee Name/Role: Hackathon Committee / Member

Dates of Service: 2019 - Present

Organization: Society of Imaging Informatics in Medicine

Committee Name/Role: National Imaging Informatics Curriculum Committee / Member

Dates of Service: 2021 – Present

Organization: American College of Radiology

Committee Name/Role: Informatics Advisory Council / Chair

Dates of Service: 2019 – Present

Organization: American College of Radiology

Committee Name/Role: Commission on Informatics / Member

Dates of Service: 2020 - Present

Organization: ACR Data Science Summit Committee Name/Role: Co-Chair

Dates of Service: 2020, 2021, 2022, Present

Organization: Radiological Society of North America

Committee Name/Role: AI Implementation: Building Expertise and Influence / Course Director

Dates of Service: 2021

Organization: Radiological Society of North America

Committee Name/Role: Vice Chair, Informatics Policy Subcommittee

Dates of Service: 2021 - Present

Cleveland Clinic

Committee Name/Role: Artificial Intelligence Governance Committee

Dates of Service: 2018 - 2020

Committee Name/Role: Cleveland Clinic - National Science Foundation AI Workshop Planning Committee

Dates of Service: 2021

Committee Name/Role: Cleveland Clinic/IBM AI Workstream Core Team

Dates of Service: 2021

TEACHING ACTIVITIES

Presentations

- 1. Chen P-H, Nijhout H., A model for Lepidopteran eyespot formation. Presented at: NC Triangle Undergraduate Research Symposium Conference, 2004, Raleigh, NC
- 2. Chen P-H, Magwene P. Global patterns of coregulatory modules across multiple genomic networks. Presented at: Howard Hughes Poster Presentation at Duke University, 2006, Durham, NC.
- 3. Iuanow E, Chen P-H, Slanetz P, Increasing incidence of benign breast disease in Men: Is this a cause for concern? Presented at: Men's Health World Congress. October 2011, Vienna, Austria
- 4. Chen P-H, Radiology for Non-Radiologists: Challenges and Opportunities, Invited Speaker at Society of Photo-Optical Instrumentation Engineers, Medical Imaging Conference (2015)
- 5. Artifacts and Non-Osseous Findings on Bone Scintigraphy. CE-available Session presented at Society of Nuclear Medicine and Molecular Imaging Technologist Section. Apr 7, 2017. Invited teaching session on atypical findings seen on bone scan.
- Introduction to Hacking with FHIR and DICOMweb API. CE/CME available session presented at Society for Imaging Informatics in Medicine Annual Conference. May 31, 2018. Review of the introductory hands-on workshop in the basics of DICOMweb and HL7 FHIR API.

- 7. Musculoskeletal Imaging Case Review. SA-CME available session presented at Society of Nuclear Medicine and Molecular Imaging Annual Conference. June 28, 2018.
- 8. Practical Machine Learning for Trainees: Where to Begin, Before You Begin. CE/CME-Available session at Society for Imaging Informatics in Medicine Annual Conference. Denver, Colorado. June 27, 2019.
- 9. AI, Radiomics, Text Mining, and More: 2018's Key Advances in Imaging Informatics. CE/CME-Available Session at Society for Imaging Informatics in Medicine Annual Conference. Denver, Colorado. June 27, 2019.
- 10. AI, Radiomics, Text Mining, and More: 2019's Key Advances in Imaging Informatics. CE/CME-Available Session at Radiologic Society of North America Annual Conference. Chicago, IL. Dec 6, 2019.
- 11. Overview of FDA Regulatory Framework for Artificial Intelligence. CE/CME-Available Session at ACR-DSI Data Science Summit. Virtual. June 23, 2020.
- 12. From AI to ROI Practical Considerations for Artificial Intelligence Implementation in a Radiology Practice. Invited by American Medical Informatics Association, May 4, 2021.
- 13. Radiology Artificial Intelligence: Current Applications and Future Opportunities. Cleveland Clinic National Science Foundation Joint Workshop on Artificial Intelligence, June 14, 2021.
- 14. Operational Recovery Cybersecurity. CE/CME-Available Session at American College of Radiology Annual Conference. Hybrid. April 27, 2022.
- 15. Building an AI Value Proposition. CE/CME-Available Session at ACR-DSI Data Science Summit. Hybrid. June 8, 2022.
- 16. Ransomware Recovery for the Radiology Practice. CE/CME-Available Session at Society for Imaging Informatics in Medicine. Hybrid. June 9, 2022.

Visiting Professorships

"Introduction to Imaging Informatics." Presented at Cleveland Clinic Foundation. Apr 19, 2018. Invited resident teaching session on imaging informatics. (4-hour preparation, 1-hour presentation)

Teaching Material Produced

- 1. Contributor, Step 1 Qmax (USMLERx), 2010 Edition
- 2. Contributor, Step 1 Qmax (USMLERx), 2011 Edition
- 3. Chen P, Neurology. In: Le T, Hwang W, editors. First Aid for the Basic Sciences: Organ Systems, Second Edition. New York City: McGraw-Hill Medical. 2011
- 4. Chen P, contributor. In: Le T, Feinstein J, Ball M, Dude A, Hoffman R, Jensen, et al, editors. First Aid Q&A for the USMLE Step 1, Third Edition. New York City: McGraw-Hill Medical. 2011

Teaching Activities

- 1. Radiology Anatomy for First Year Radiology Residents (2013-2014) (3-hour preparation, 3 x 1-hour presentations)
- 2. "Introduction to Radiology," Hospital of the University of Pennsylvania, 2014. (6-hour preparation, 6 x 1-hour presentations)
- 3. "Engaging Grassroots to Improve Healthcare Quality," morning conference in diagnostic radiology residency, Hospital of the University of Pennsylvania, 2015. Using Harvard Business School's Cincinnati Children's Hospital case to apply quality improvement science in healthcare settings. (3-hour preparation, 1-hour presentation)
- 4. "Clinical Correlation: Musculoskeletal Imaging," University of the Sciences in Philadelphia, 2016. Physical therapy students. For 2nd year students in physical therapy training program. (5-hour preparation, 2-hour presentation)
- 5. "Introduction to Radiology," University of the Sciences in Philadelphia, 2016. For 1st year students in physical therapy training program. (5-hour preparation, 2-hour presentation)
- 6. "Fake it 'til You Make it: Innovation Strategies in Imaging" Roundtable session at Society of Imaging Informatics in Medicine. July 1, 2016. Teaching session using rapid prototyping techniques to test innovation ideas at minimal cost. (2-hour preparation, 1-hour presentation)
- 7. "Educational Informatics with Radiology Resident Analytics." Presented at Hospital of University of Pennsylvania Radiology Informatics Fellowship. Aug 31, 2016. (4-hour preparation, 1-hour presentation)
- 8. "Shields Up! Introduction to Defensive Imaging Data Science." Imaging Informatics Fellowship. University of Pennsylvania. January 30, 2019. (3-hour preparation, 30-minute presentation)
- 9. "Developing a Career in Imaging Informatics as a Radiologist." Radiology Residency Program at Hospital of the University of Pennsylvania. April 24, 2019 (2-hour preparation, 45-minute presentation)

- 10. "Imaging Informatics for the Radiologist" Imaging Informatics Fellowship Program at University of Pennsylvania. March 31, 2021 (2-hour preparation, 45-minute presentation)
- 11. "Introduction to Imaging Informatics" Residency Program at University of Pennsylvania. April 13, 2021 (2-hour preparation, 60-minute presentation)
- 12. "From AI to ROI: Challenges and Considerations for Choosing and Implementing AI Tools in a Radiology Practice," American Medical Informatics Association, May 4, 2021 (4-hour preparation, 60-minute presentation)
- 13. "Deep Learning Applications in Clinical Radiology," RSNA AI Implementation Spotlight Course, July 21, 2021 (2-hour preparation, 20-minute presentation)

RESEARCH SUPPORT

1. Granting Agency: Siemens Healthineers

Title: Artificial Intelligence Model for Acute Neurological Abnormalities on MRI

Principal Investigator: Manoj Massand, MD

Role: Co-Investigator, 1%

Total Direct Cost Awarded: \$53,825 Dates: 6/1/2019 – 12/31/2020

2. Granting Agency: Siemens Healthineers

Title: Automatic Shoulder Lesion Detection and Characterization

Principal Investigator: Xiaojuan Li, PhD

Role: Co-Investigator, 1%

Total Direct Cost Awarded: \$57,577

Dates: 8/1/2019 - 7/31/2020

3. Granting Agency: Cleveland Clinic Innovations

Title: Automated Identification of Acute Aortic Syndromes

Co-Principal Investigators: Po-Hao Chen, MD; Paul Schoenhagen, MD

Role: Principal Investigator

Total Direct Cost Awarded: \$40,228.60

Dates: 4/22/2021 - 4/21/2022

4. Granting Agency: Society to Improve Diagnostic Medicine

Title: Creating Actionable Results Analytics and Dashboard Tracking

Principal Investigator: Rekha Mody, MD

Role: Co-Investigator, 0%

Total Direct Cost Awarded: \$50,000 Dates: 9/29/2021 – 9/28/2022

5. Grating Agency: Cleveland Clinic Catalyst Grant

Title: Sarcopenia in Heart Failure: Diagnosis and Management

Principal Investigator: Po-Hao Chen, MD MBA

Role: Principal Investigator

Total Direct Cost Awarded: \$23,500 Dates: 1/1/2022 – 12/31/2022

6. Grating Agency: National Institute of Health

Title: Radiomic approaches to improve targeting for atrial fibrillation catheter ablation (R01 HL158071)

Principal Investigator: Mina Chung, MD

Role: Significant Contributor

Total Direct Cost Awarded: \$2,950,551

Dates: 7/1/2021 – 06/30/2025

BIBLIOGRAPHY

Peer Reviewed Articles

1. Reed R, Chen P-H, Nijhout H, Cryptic variation in butterfly eyespot development: the importance of sample size in gene expression studies. *Evolution & Development* 9:2-9, 2007

- Ramappa A, Chen P-H, Hawkins R, Noonan T, Hackett T, Sabick M, Decker MJ, Keeley D, Torry MR.
 Anterior shoulder forces in Professional and Little League pitchers. *Journal of Pediatric Orthopaedics*. 30:1-7, 2010
- 3. Levy C, Khaled M, Robinson K, Veguilla R, Chen P-H, Yokoyama S, Makino E, Lu J, Larue L, Beermann F, Chin L, Bosenberg M, Song JS, Fisher DE. Lineage-specific transcriptional regulation of DICER by MITF in melanocytes. *Cell.* 141:994-1005, 2010
- 4. Levy C, Khaled M, Iliopoulos D, Janas M, Schubert S, Pinner S, Chen P-H, Li S, Fletcher AL, Yokoyama S, Scott KL, Garraway LA, Song JS, Granter SR, Turley SJ, Fisher DE, Novina CD. Intronic miR-211 assumes the tumor suppressive function of its host gene in melanoma. *Molecular Cell*. 40:841-849, 2010
- 5. Chen P-H, Ghosh E, Slanetz P, Segmental breast calcifications. Am J Roentgenol. 199:532-542, 2012
- Janas M, Wang E, Love T, Harris A, Stevenson K, Semmelmann K, Shaffer J, Chen P-H, Doench JG, Yerramilli SV, Neuberg DS, Iliopoulos D, Housman DE, Burge CB, Novina CD. Reduced expression of ribosomal proteins relieves microRNA-mediated repression. *Molecular Cell*. 46:171–86, 2012
- 7. Kung J, Slanetz P, Chen P-H, Lee K, Donohoe K, Eisenberg R. Resident and attending physician attitudes regarding an audience response system. *J Am Coll Radiol*. 11:828–31, 2012
- 8. **Chen P-H**, Slanetz P. Incremental clinical value of ultrasound in men with mammographically confirmed gynecomastia. *European Journal of Radiology*. 2014 Jan;83(1):123–9.
- 9. Gallant J, Traeger L, Volkening J, Moffett H, **Chen P-H**, Novina C, Phillips GN, Anand R, Wells GB, Pinch M, Güth R, Unguez GA, Albert JS, Zakon H, Samanta MP, Sussman MR. Genomic basis for the convergent evolution of electric organs. *Science*. 2014 Jun 27;344(6191):1522–5.
- 10. Traeger LL, Volkening JD, Moffett H, Gallant JR, Chen P-H, Novina CD, Phillips GN, Anand R, Wells GB, Pinch M, Güth R, Unguez GA, Albert JS, Zakon H, Sussman MR, Samanta MP. Unique patterns of transcript and miRNA expression in the South American strong voltage electric eel (Electrophorus electricus). *BMC Genomics*. 2015;16:243.
- 11. **Chen P-H**, Chen YJ, Cook TS. Capricorn A web-based automatic case log and analytic tool for diagnostic radiology residents. *Acad Radiol*. 2015 Oct;22(10):1242–51.
- 12. **Chen P-H**, Loehfelm T, Kamer A, Lemmon A, Cook TS, Kohli M. Toward data-driven radiology education—early experience building Multi-Institutional Academic Trainee Interpretation Log Database (MATILDA). *J Digit Imaging*. 2016 Mar 4.
- 13. Wildenberg JC, Chen P-H, Scanlon MH, Cook TS. Attending Radiologist Variability and Its Effect on Radiology Resident Discrepancy Rates. *Acad Radiol*. 2017 Jan 24.
- Chen P-H, Roth H, Galperin-Aizenberg M, Ruutiainen AT, Gefter W, Cook TS. Improving Abnormality Detection on Chest Radiography Using Game-Like Reinforcement Mechanics. *Acad Radiol*. 2017;24(11):1428–35.
- 15. **Chen P-H**, Mankoff DA, Sebro RA. Clinical overview of the current state and future applications of positron emission tomography in bone and soft tissue sarcoma. *Clin Transl Imaging*. 2017 Aug;5(4):343–58.
- 16. **Chen P-H**, Zafar H, Galperin-Aizenberg M, Cook T. Integrating Natural Language Processing and Machine Learning Algorithms to Categorize Oncologic Response in Radiology Reports. *J Digit Imaging*. 2018 Apr;31(2):178–84.
- 17. Deitte LA, **Chen P-H**, Scanlon MH, Heitkamp DE, Davis LP, Urban S, Marx MV, Slanetz PJ. Twenty-four–Seven In-house Faculty and Resident Education. *J Am Coll Radiol*. 2018 Jan;15(1):90–2
- 18. **Chen P-H**, Cross N. IoT in Radiology: Using Raspberry Pi to Automatically Log Telephone Calls in the Reading Room. *J Digit Imaging*. 2018 Jun;31(3):371–8.
- 19. **Chen P-H**, Scanlon MH. Teaching Radiology Trainees from the Perspective of a Millennial. Acad Radiol. 2018 Jun;25(6):794–800.
- 20. Gillman J, Wu SE, Rowland J, Scanlon M, Chen P-H. Comparison of In-Person and Digital Radiology Resident Consultation Services. *J Am Coll Radiol*. 2019 Jul;16(7):972–5.
- 21. Duong MT, Rauschecker AM, Rudie JD, **Chen P-H**, Cook TS, Bryan RN, et al. Artificial intelligence for precision education in radiology. *Br J Radiol*. 2019 Jul 26;20190389.
- 22. **Chen P-H**. Essential Elements of Natural Language Processing: What the Radiologist Should Know. *Acad Radiol*. 2020 Jan;27(1):6–12.
- 23. Martin-Carreras T, **Chen P-H.** From Data to Value: How Artificial Intelligence Augments the Radiology Business to Create Value. *Semin Musculoskelet Radiol.* 2020 Feb;24(01):65–73.
- 24. Shah C, Cook TS, **Chen P-H**, Hyland S, Heavener R, Kahn CE, et al. Improving Triage of After-Hours Radiology Examinations Through Worklist Unification. *J Am Coll Radiol*. 2020 Mar; epub ahead of print.
- 25. Martin-Carreras TT, Li H, Chen P-H. Interpretative applications of artificial intelligence in musculoskeletal imaging: concepts, current practice, and future directions. *J Med Artif Intell*. 2020 Sep;3:13–13.
- 26. Slanetz PJ, Daye D, **Chen P-H**, Salkowski LR. Artificial Intelligence and Machine Learning in Radiology Education Is Ready for Prime Time. *J Am Coll Radiol*. 2020 Dec;17(12):1705–7.

- 27. Rudie JD, Duda J, Duong MT, **Chen P-H**, Xie L, Kurtz R, et al. Brain MRI Deep Learning and Bayesian Inference System Augments Radiology Resident Performance. *J Digit Imaging* [Internet]. 2021 Jun 15 [cited 2021 Jun 23]; Available from: https://link.springer.com/10.1007/s10278-021-00470-1
- 28. **Chen P-H**, Bodak R, Gandhi NS. Ransomware Recovery and Imaging Operations: Lessons Learned and Planning Considerations. *J Digit Imaging*. 2021 Jun 22;s10278-021-00466–x.
- 29. Xavier BA, **Chen P-H**. Natural Language Processing for Imaging Protocol Assignment: Machine Learning for Multiclass Classification of Abdominal CT Protocols Using Indication Text Data. *J Digit Imaging* [Internet]. 2022 Jun 2; Available from: https://link.springer.com/10.1007/s10278-022-00633-8
- 30. Mirzai S, Eck BL, **Chen P-H**, Estep JD, Tang WHW. Current Approach to the Diagnosis of Sarcopenia in Heart Failure: A Narrative Review on the Role of Clinical and Imaging Assessments. *Circ Heart Fail*. 2022 Aug 4;101161CIRCHEARTFAILURE121009322.
- 31. Aleixo GF, Valente SA, Wei W, **Chen P-H**, Moore HC. Sarcopenia detected with bioelectrical impedance versus CT scan and chemotherapy tolerance in patients with early breast cancer. *Breast Cancer*. Accepted/In-Press

United States Patent

Schoenhagen P, **Chen P-H**, Piraino D, Obuchowski N. Automated Identification of Acute Aortic Syndrome in Computed Tomography. Cleveland, OH; US 2020/0402232 A1. Awarded June 2022

Edited Books, Monographs or Journal Volumes

- Chen P-H, Deserno TM, editors. Proceedings of SPIE Medical Imaging 2020: Imaging Informatics for Healthcare, Research, and Applications. In: Medical Imaging 2020: Imaging Informatics for Healthcare, Research, and Applications [Internet]. Houston, United States: SPIE; 2020 [cited 2020 May 14]. p. 0. Available from: https://www.spiedigitallibrary.org/conference-proceedings-of-spie/11318/2570206/Front-Matter-Volume-11318/10.1117/12.2570206.full
- Chen P-H, Bak PR, editors. Proceedings of SPIE Medical Imaging 2019: Imaging Informatics for Healthcare, Research, and Applications. In: Medical Imaging 2019: Imaging Informatics for Healthcare, Research, and Applications [Internet]. San Diego, United States: SPIE; 2019 [cited 2020 May 14]. p. 0. Available from: https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10954/2533352/Front-Matter-Volume-10954/10.1117/12.2533352.full
- 3. Chen P-H, Zhang J, editors. Proceedings of SPIE Medical Imaging 2018: Imaging Informatics for Healthcare, Research, and Applications. In: Proceedings of SPIE Medical Imaging 2018: Imaging Informatics for Healthcare, Research, and Applications [Internet]. Houston, United States: SPIE; 2018 [cited 2020 Jul 21]. p. 0. Available from: https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10579/2323917/Front-Matter-Volume-10579/10.1117/12.2323917.full

Invited Manuscripts

- 1. **Chen P-H**, Rodriguez E, Chacko A, Appleton P, Minimally invasive plate osteosynthesis of periprosthetic femur fractures associated with total hip replacement: a case series. *Orthopaedic Journal at Harvard Medical School*, 10:57-59, 2008.
- 2. **Chen P-H**, Botzolakis E, Mohan S, Bryan RN, Cook T. Feasibility of streamlining an interactive Bayesian-based diagnostic support tool designed for clinical practice. In: Zhang J, Cook TS, editors. *Proceedings of SPIE Medical Imaging*. 2016. p. 97890C.
- 3. Duda JT, Botzolakis E, **Chen P-H**, Mohan S, Nasrallah I, Rauschecker A, Rudie J, et al. Bayesian network interface for assisting radiology interpretation and education. In: Zhang J, Chen P-H, editors. *Proceedings of SPIE Medical Imaging*; 2018. p. 26.
- 4. Shah C, Kohlmyer S, Jones S, **Chen P-H**. A Translational Clinical Assessment Workflow for the Validation of External Artificial Intelligence Models. In: Park B, Deserno T, editors. *Proceedings of SPIE Medical Imaging*; 2021
- 5. Shah C, Chen P-H. Beyond the AJR: Robust Ability of Artificial Intelligence to Detect Race Underscores the Need for Inclusivity and Transparency. *Am J Roentgenol*. Accepted/In-Press.

Book Chapters

Neurology (Chapter 5) in Le, T. (Ed.) First Aid for the Basic Sciences: Organ Systems 2ed, McGraw-Hill Medical, New York, 2011

Abstracts

- 1. **Chen P-H**, Slanetz P, Incremental clinical value of ultrasound in men with mammographically confirmed gynecomastia. Presented at: Radiological Society of North America 2012 Scientific Assembly and Annual Meeting, November 25–30, 2012, Chicago, IL
- 2. Chen Y, Chen P-H, Scanlon M, Cook T, What studies did you interpret last year? Creation of Capricorn Platform for Monitoring Study Volume and Assessment of Residents' Experience. Presented at: Radiological Society of North America 2014 Scientific Assembly and Annual Meeting, November 30 December 5, 2014, Chicago, IL
- 3. **Chen P-H**, Chen Y, Ruutiainen A, Kim S, Cook T. The More You See Effect of First Year Residents' Interpretation Volume on Independent Call as Second Year Residents. Presented at: Radiological Society of North America 2014 Scientific Assembly and Annual Meeting, November 30 December 5, 2014, Chicago, IL
- 4. Ruutiainen A, Chen P-H, Roth H, Cook T, Rapid-feedback using a Web-based Module to Teach the Grading of Degeneration on an MRI of the Lumbar Spine. Presented at: Radiological Society of North America 2014 Scientific Assembly and Annual Meeting, November 30 December 5, 2014, Chicago, IL
- 5. **Chen P-H**, Ruutiainen A, Roth H, Cook T, A Web-based Open Source Platform for Radiology Education using Rapid Reinforced Learning Mechanics. Presented at: Radiological Society of North America 2014 Scientific Assembly and Annual Meeting, November 30-December 5, 2014, Chicago, IL
- 6. Loehfelm T, Chen P-H, Kamer A, Lemmon A, Kohli M, Cook T, Multi-Institutional Resident Case Log Analysis: Evaluating Performance against ACGME Minimum Requirements. Presented at: Association of University Radiologists Annual Meeting, April 14-17, 2015, New Orleans, LA
- 7. Loehfelm T, Chen P-H, Kamer A, Lemmon A, Cook T, Kohli M, Multi-Institutional Resident Case Log Analysis: Effect of the new Core Exam Format on Fourth-Year Resident Productivity. Presented at: Association of University Radiologists Annual Meeting, April 14-17, 2015, New Orleans, LA
- 8. Wildenberg J, Chen P-H, Kahn C, Cook T, Using Structured Reporting of Focal Lesions in the Abdomen to Assess Radiology Trainees' Performance. Presented at American College of Radiology Annual Meeting, May 17-21, 2015, Washington, DC
- Wildenberg J, Chen P-H, Kahn C, Zafar H, Cook T, Structured Reporting of Focal Lesions in the Abdomen to Assess Radiology Trainees' Performance Demonstrates Decreased Detection Errors for Suspicious Lesions with Increased Training. Presented at Radiology Society of North America 2015 Scientific Assembly and Annual Meeting, Nov 29-Dec 4, 2015. Chicago, IL
- 10. **Chen P-H**, Chen Y, Scanlon M, Cook T, Resident Performance Analytics Using Structured Attending Feedback and #Hashtag Sharing Features. Presented at Radiology Society of North America 2015 Scientific Assembly and Annual Meeting, Nov 29-Dec 4, 2015. Chicago, IL
- 11. **Chen P-H**, Botzolakis E, Mohan S, Bryan R, Cook T, Streamlining an Interactive Bayesian-Based Diagnostic Support Tool Alongside Traditional PACS System. Presented at Society of Photo-Optical Instrumentation Engineers Medical Imaging 2016, Feb 27–Mar 3, 2016. San Diego, CA
- 12. Wildenberg J, Chen P-H, Cook T, Resident Discrepancy Rates Are Not Entirely Explained by Attending Variability. Presented at Society of Imaging Informatics in Medicine Annual Conference 2016, Jun 28-Jul 1, 2016. Portland, OR
- 13. **Chen P-H**, Roth H, Galperin-Aizenberg M, Ruutiainen A, Cook TS, Implementation and Initial Experience Using a Web-Based, Rapid-Fire Teaching System with Game-Like Elements for Chest Radiography. Presented at Society of Imaging Informatics in Medicine Annual Conference 2016, Jun 28-Jul 1, 2016. Portland, OR
- 14. **Chen P-H**, Mohan S, Cook T, Nasrallah I, Bryan R, Botzolakis E, Development of a Novel Bayesian Network Interface for Radiology Diagnosis Support and Education. Presented at Radiology Society of North America 2016 Scientific Assembly and Annual Meeting, Nov 26-Dec 2, 2016. Chicago, IL
- 15. Rudie JD, Xie L, Rauschecker AM, Ding Y, Chen P-H, Nasrallah IM, Bryan RN, Mohan S, Botzolakis EJ, Gee J. Automated Diagnosis of Basal Ganglia Diseases Using a Customized Image-Processing Pipeline Coupled with Bayesian Networks. Presented at American Society of Neuroradiology, Apr 22–Apr 27, 2017, Long Beach, CA
- 16. **Chen P-H**, How to Teach Millennials from the Perspective of a Millennial. Presented at Association of University Radiologists Annual Meeting, May 8-May 11, 2017. Hollywood, FL
- 17. **Chen P-H**, Zafar H, Cook T. Integrating natural language processing and machine learning algorithms to categorize oncologic response in radiology reports. Presented at Society of Imaging Informatics in Medicine Annual Conference, Jun 1-Jun 3, 2017. Pittsburgh, PA

- 18. Witschey WR, Litt H, Chen P-H, Schnall MD, Yushkevich P. Dynamic Parameter Quantification from Adaptive Cine MRI Using a Deep Convolutional Neural Network. Presented at ISMRM Workshop on Magnetic Resonance Imaging of Cardiac Function, Aug 17–Aug 20, 2017, New York City, New York
- 19. Rudie J, Xie L, Rauschecker A, Chen P-H, Cook TS, Nasrallah I, Mohan S, Botzolakis E, Bryan N, Gee J. Development of an Automated Diagnostic System for Neuroradiology: Combining Image Processing and Bayesian Networks. Presented at Conference on Machine Intelligence in Medical Imaging, Sept 26 Sept 27, 2017. Baltimore, MD
- 20. Wildenberg J, Chen P-H, Park B, Cook TS. Machine Learning for Image and Report Data: What We Know, What We Don't, and What We Can Learn. Accepted to Radiology Society of North America 2017 Scientific Assembly and Annual Meeting, Nov 26-Dec 1, 2017. Chicago, IL
- 21. **Chen P-H**, Remeis P, Bergendahl H, Schnall MD, Trerotola SO, Kahn CE. From Reactive to Proactive: Implementing a Low-Threshold Reporting System in a Large, Multisite Diagnostic Radiology Department. Presented at Radiology Society of North America 2017 Scientific Assembly and Annual Meeting, Nov 26-Dec 1, 2017. Chicago, IL
- 22. Duda JT, Botzolakis E, Chen P-H, Mohan S, Nasrallah I, Rauschecker A, et al. A Bayesian network interface for assisting radiology interpretation and education. Presented at Society of Photo-Optical Instrumentation Engineers Medical Imaging 2018, Feb 12–Feb 16, 2018. Houston, TX
- 23. Jones BC, Chen P-H, Balthazar P, Cook TS, Safdar NM, Nagy PG. Cultivating the Future of Imaging Informatics: Creation of a Resident, Fellow, and Doctoral Student Section of the Society for Imaging Informatics in Medicine. Presented at Society of Imaging Informatics in Medicine Annual Meeting, May 31 – Jun 2, 2018. National Harbor, MD
- 24. Juan MC, Chen P-H, Schoenhagen P. From Big Data to Big Value: Cloud-based, Real-time Information Sharing Leads to Improved Critical Decision Making and Management of Acute Aortic Emergencies; Can AI Play a Role? Presented at Canadian Association of Radiology Annual Conference, Apr 11 Apr 14, 2019. Montreal, OC, Canada.
- 25. Rudie J, Xie L, Wang J, Duda J, Choi J, Mattay R, **Chen P-H**, Bryan NR, Botzolakis E, Nasrallah I, Cook TS, Mohan S, Gee J, Rauschecker A. Artificial Intelligence System for Automated Brain MR Diagnosis Performs at Level of Academic Neuroradiologists and Augments Resident Performance. Presented at Society of Imaging Informatics in Medicine Annual Meeting, Jun 26 Jun 28, 2019. Denver, CO
- 26. Ward R, Stevens E, Wetzel J, Purysko A, **Chen, P-H**. Developing a semi-automated data pipeline for use in prostate MRI quality reporting. Presented at Society of Imaging Informatics in Medicine Annual Meeting, Jun 26 Jun 28, 2019. Denver, CO
- 27. **Chen P-H**, Wetzel J, Ciancibello M, Marrero L, Ward R, Spitznagel R, Piraino D. Researching Search Usage Patterns of a Radiology Information System and Report Query Tool. Presented at Society of Imaging Informatics in Medicine Annual Meeting, Jun 26 Jun 28, 2019. Denver, CO
- 28. Piraino D, Wetzel J, Ciancibello M, Marrero L, Spitznagel R, **Chen, P-H**. Quantitative Evaluation of Convolutional Neural Network's Performance Using Image Transformations and Adversarial Attacks. Presented at Society of Imaging Informatics in Medicine Annual Meeting, Jun 26 Jun 28, 2019. Denver, CO
- 29. Xavier B, Chen P-H. Are Commercial Deep Learning Builders Superior to Traditionally Built Machine Learning Models for Natural Language Processing? A Head-to -head Comparison using Abdominal CT Protocol Classification. Presented at Society of Imaging Informatics in Medicine Annual Conference. Virtual Conference. June 24-26, 2020.
- 30. Hussain M, Strassner B, Chen P-H. PwnPax A Hands-On Penetration Testing Lab for Imaging Informatics Professionals. Presented at Society of Imaging Informatics in Medicine Annual Conference. Virtual Conference. June 24-26, 2020.
- Chen P-H, Gill A, Mody R. A Peer Learning System Integrated into the Radiology Workflow Improves Case Submission Rates. Presented at Society of Imaging Informatics in Medicine Annual Conference. Virtual Conference. June 24-26, 2020.
- 32. Ilkanich C and **Chen P-H**. Combined Video and Interactive Mini-Lecture Series on Artificial Intelligence Increases Resident Engagement. Association of University Radiologists Annual Conference. May 3-6, 2021
- 33. Aleixo G, Rybicki L, **Chen P-H**, Gandhi NS, Anwer F, Dean R, et al. The Association of Pre-Transplant Adiposity with Autologous Hematopoietic Stem Cell Transplantation Outcomes in Lymphoma. Presenting at Transplantation & Cellular Therapy Meetings of ASTCT and CIBMTR. Feb 2, 2022.
- 34. Aleixo, G, Wei W, Valente S, **Chen P-H**, Moore H. CT scan versus bioelectrical impedance spectrometry sarcopenia assessment to predict chemotherapy toxicity in early breast cancer. Presented at American Society of Clinical Oncology Annual Meeting. June 3, 2022.
- 35. Mirzai S, Persits IP, Sarnaik K, Estep JD, Chen P-H, Tang WHW. Sarcopenia With Low Serum Albumin Is Associated With Worse Prognosis In Patients Hospitalized For Acute Decompensated Heart Failure. Accepted to American Heart Association Annual Conference. Nov 5, 2022

- 36. Persits I, Mirzai S, Estep J, Chen P-H, Reed G, Tang WHW. Sarcopenia Evaluated by Thoracic Computed Tomography is Associated with Higher Mortality in Patients Undergoing Transcatheter Aortic Valve Replacement. Accepted to: American Heart Association (AHA) Nov 5-7, 2022; Chicago, IL
- 37. Nachand D, Thomas R, Hulme K, Gandhi N, **Chen P-H**. Selection and Maintenance of Consumer Grade Displays for Home Reading Workstations. Accepted for Presentation at Radiologic Society of North America Annual Meeting. Nov 28, 2022.
- 38. Hulme K, Thomas R, Nachand D, Gandhi N, **Chen P-H**. Let's not "Plug and Pray" Long-term Tradeoffs of Consumer-Grade Displays in Diagnostic Use Compared to Medical-Grade Displays. Accepted for Presentation at Radiologic Society of North America Annual Meeting. Nov 28, 2022.