

## *Curriculum Vitae*

# Peijin Han, MBBS, MHS

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### **EDUCATION and RESEARCH TRAINING**

- 07/2017 – present      **Post-doctoral Fellow**  
Johns Hopkins Medicine, Department of Radiation Oncology and  
Molecular Radiation Sciences (Baltimore, MD)  
**Supervisor:** Todd McNutt, PhD
- 08/2015 – 05/2017      **Master of Health Science in Epidemiology, GPA: 3.80/4.00**  
Johns Hopkins Bloomberg School of Public Health (Baltimore, MD)  
**Thesis:** Dietary choline and betaine intakes and risk of total and lethal  
prostate cancer in the Atherosclerosis Risk in Communities (ARIC) Study  
**Advisor:** Elizabeth Platz, ScD
- 09/2010 – 06/2015      **Bachelor of Medicine in Clinical Medicine (MBBS), GPA: 3.60/4.00**  
Zhongshan School of Medicine, Sun Yat-sen University (Guangzhou,  
China)

### **RESEARCH EXPERIENCE**

- 07/2017 – present      **Johns Hopkins University, Department of Radiation Oncology and  
Molecular Radiation Sciences (Baltimore, MD)**  
**Project title:** A Retrospective Data Mining Review of Standard of Care  
Outcomes of the Head and Neck and Thoracic Clinical Radiation  
Oncology Services (Canon Medical Systems Corporation FUNDED)  
**Supervisor:** Todd McNutt, PhD
- 07/2016 – 08/2017      **Johns Hopkins Medical Institutions, Department of General Internal  
Medicine (Baltimore, MD)**  
**Project title:** Defining a patient-centered research and health agenda for  
women with diabetes using the DiabetesSistersVoices online community  
(PCORI FUNDED)  
**Supervisor:** Wendy Bennett, MD MPH
- 04/2016 – 05/2017      **Johns Hopkins Bloomberg School of Public Health (Baltimore, MD)**  
**Master thesis project:** Dietary choline and betaine intakes and risk of total  
and lethal prostate cancer in the Atherosclerosis Risk in Communities  
(ARIC) Study

- 01/2014 – 05/2014      **Sun Yet-sen University Cancer Center (Guangzhou, China)**  
**Project title:** SIRT3 Is a Novel Prognostic Biomarker for Esophageal Squamous Cell Carcinoma
- 12/2012 – 08/2013      **Zhongshan Medical School, Sun Yat-sen University, Undergraduate Research Training Program (Guangzhou, China)**  
**Project title:** The Protective Effect of Breviscapine on Acute Alcoholic Liver Injury in Mouse

### **CLINICAL TRAINING**

- 02/2015 – 03/2015      **Indiana University Hospital (IUH), Department of Gastroenterology & Hepatology, (Indianapolis, IN)**  
Medical Student Elective (Preceptor: Monica Fisher, MD)
- 06/2014 – 06/2015      **Sun Yat-sen University (SYSU), The Third Affiliated Hospital, (Guangzhou, China)**  
Clinical Intern
- 04/2014 – 05/2014      **Sun Yet-sen University Cancer Center (Guangzhou, China)**  
Clinical Intern

### **PUBLICATIONS (PUBLISHED)**

- S. Yan, X. Han., **P. Han**, H. Chen, L. Huang, Y. Li. SIRT3 Is a Novel Prognostic Biomarker for Esophageal Squamous Cell Carcinoma. *Medical Oncology*. 2014 Aug; 31(8):103. doi: 10.1007/s12032-014-0103-8.
- T. McNutt, B. Stanley, L. Daniel, K. Moore, I. Shpitser, W. Jiang, P. Lakshminarayanan, Z. Cheng, **P. Han**, X. Hui, M. Nakatsugawa, J. Lee, J. Moore, S. Robertson, V. Shah, R. Taylor, H. Quon, J. Wong, T. DeWeese. “Using Big Data Analytics to Advance Precision Radiation Oncology.” *International Journal of Radiation Oncology\*Biophysics* 101, no. 2 (June 1, 2018): 285–91. <https://doi.org/10.1016/j.ijrobp.2018.02.028>.
- T. McNutt, M. Bowers, S. Cheng, **P. Han**, X. Hui, J. Moore, S. Robertson, C. Mayo, R. Voong, H. Quon. “Practical Data Collection and Extraction for Big Data Applications in Radiotherapy.” *Medical Physics* 0, no. ja. Accessed July 11, 2018. <https://doi.org/10.1002/mp.12817>.
- L. Peng, A. Narang, C. Gergis, N. Radwan, **P. Han**, A. Marciscano, Scott. Robertson, et al. “Effects of Perineural Invasion on Biochemical Recurrence and Prostate Cancer-Specific Survival in Patients Treated with Definitive External Beam Radiotherapy.” *Urologic Oncology: Seminars and Original Investigations* 36, no. 6 (June 1, 2018): 309.e7-309.e14. <https://doi.org/10.1016/j.urolonc.2018.02.008>.

### **PUBLICATIONS (SUBMITTED/UNDER REVISION)**

- **P. Han**, A. Bidulescu, J. Barber, S. Zeisel, C. Joshu, A. Prizment, M. Vitolins, E. Platz. Dietary choline and betaine intakes and risk of total and lethal prostate cancer in the Atherosclerosis Risk in Communities (ARIC) Study. *Cancer Cause & Control*, (Manuscript ID: CACO-D-18-00286) *Under revision*.
- **P. Han**, Lakshminarayanan. P, Jiang. W, Shpitser. I, Hui. X, Lee. SH et al. The Influence of Regional Dose/Volume Metrics Patterns in Salivary Glands and Oral Cavity on Xerostomia: From Injury to Recovery. *Nature Scientific Reports*, (Manuscript ID: SREP-18-32808) *Under revision*.

### **CONFERENCE PRESENTATIONS**

- **[Selected for Oral presentation and Science Highlight] P. Han**, P. Lakshminarayanan, W. Jiang, I. Shpitser, X. Hui, S. Lee, Z. Cheng et al. Head and Neck Salivary Gland Spatial Dose-Volume Histogram (DVH) Patterns Predict Radiation-Induced Xerostomia, From Injury to Recovery. *American Association of Physics in Medicine (AAPM)*: Nashville, TN, USA, Aug 2018
- **[Selected for Poster Presentation] P. Han**, P. Lakshminarayanan, W. Jiang, I. Shpitser, S. H. Lee, Z. Cheng et al. Dose-volume histogram (DVH) patterns within the salivary glands and clinical parameters predict xerostomia in head and neck cancer (HNC) patients, from injury to recovery. *American Society of Radiation Oncology (ASTRO)*: Austin, TX, USA, Oct 2018
- **[Selected for Poster Presentation] P. Han**, W. Jiang, I. Shpitser, E. Cecil, Z. Cheng, M. Muse et al. Moderate drinking is protective for swallowing function among HNC patients. *American Society of Radiation Oncology (ASTRO)*: Austin, TX, USA, Oct 2018
- **[Selected for Poster Presentation] L. Peng, L. Chen, P. Han, B. Baker, C. Shen, C. Gui et al.** Concurrent Immunotherapy Usage and Asymmetric Growth May Distinguish True Progression from Treatment Effect in Growing Brain Metastases after Stereotactic Radiosurgery. *American Society of Radiation Oncology (ASTRO)*: Austin, TX, USA, Oct 2018
- **[Selected for Poster Presentation] T. McNutt, W. Jiang, P. Lakshminarayanan, X. Hui, Z. Cheng, M. Bowers, H. Quon, I. Shpitser, S. Siddiqui, P. Han, R. Taylor.** Radio-Morphology: Parametric Shape-Based Features for Outcome Prediction in Radiotherapy. *American Society of Radiation Oncology (ASTRO)*: Austin, TX, USA, Oct 2018
- **[Selected for Poster Presentation] P. Lakshminarayanan, W. Jiang, S. Robertson, Z. Cheng, P. Han, M. Bowers, J. Moore, J. Lee, H. Quon, R. Taylor, T. McNutt.** Radio-Morphology: Parametric Shape-Based Features for Outcome Prediction in Radiotherapy. *American Society of Radiation Oncology (ASTRO)*: Austin, TX, USA, Oct 2018
- **[Selected for Poster Presentation] A. Ferro, P. Han, R. Voong, T. R. McNutt, L. Chang, P. Lakshminarayanan, M. R. Bowers, L. Anderson, E. Desmarais, E. Honig, and R. K. Hales.** Baseline COPD in Lung Cancer Patients is Not Associated with Increased Radiation Pneumonitis or Increased Pulmonary Function Decline Following Lung Radiation Therapy. *American Society*

*of Radiation Oncology (ASTRO):* Austin, TX, USA, Oct 2018

- [Selected for Poster Presentation] A. Ferro, **P. Han**, R. Voong, T. R. McNutt, L. Chang, P. Lakshminarayanan, M. R. Bowers, L. Anderson, E. Desmarais, E. Honig, and R. K. Hales. Pulmonary Function Trends Following Modern Radiotherapy: Association of Subacute PFT Decline with CTC Provider Assessment and Analysis of Late PFT Change. *American Society of Radiation Oncology (ASTRO):* Austin, TX, USA, Oct 2018
- [Selected for Poster Presentation] C. Elledge, **P. Han**, R. Hales, T. McNutt, M. Bowers, S. Alcorn, J. Feliciano, C. Snyder, C. Hu, R. Voong. Real-time Collection of Patient-Reported Outcomes (PROs) in Lung Cancer Patients Undergoing Thoracic Radiation. *American Society of Radiation Oncology (ASTRO):* Austin, TX, USA, Oct 2018
- [Oral presentation] **P. Han**, W. Nicholson, A. Norton & W. Bennett. Development and preliminary findings of DiabetesSistersVoices - an online community to engage women with diabetes about research and healthcare priorities. *Society of General Internal Medicine Annual Meeting*, Washington, DC, USA, Apr 2017.
- [Selected for Poster Presentation] P. Lakshminarayanan, W. Jiang, S. Robertson, Z. Cheng, **P. Han**, M. Bowers, J. Moore, J. Lee, H. Quon, R. Taylor, T. McNutt. Radio-Morphology: Parametric Shape-Based Features for Outcome Prediction in Radiotherapy. *American Association of Physics in Medicine (AAPM):* Nashville, TN, USA, Aug 2018.
- [Selected for ePoster Discussion] K. Sheikh, L. Peng, S. Lee, **P. Han**, Z. Cheng, P. Lakshminarayanan, T. McNutt, H. Quon, J. Lee. CT/MRI-Based Radiomics Analysis to Predict Radiation-Induced Xerostomia in Head and Neck Cancer Radiotherapy. *American Association of Physics in Medicine (AAPM):* Nashville, TN, USA, Aug 2018.
- [Selected for Poster Presentation] S. Lee, **P. Han**, R. Hales, K. Voong, J. Wong, T. McNutt, J. Lee. Multilevel Radiomics Analysis for Prediction of Baseline Pulmonary Function in Lung Cancer Patients Treated with IMRT. *American Association of Physics in Medicine (AAPM):* Nashville, TN, USA, Aug 2018.

## **PROFESSIONAL DEVELOPMENT**

- Honors/Awards: Master Student Scholarship (\$30,000), Johns Hopkins Bloomberg School of Public Health (2016); Merit Student Scholarship, Zhongshan Medical School (Top 10%) (2011-2014)
- Machine learning, Epidemiology and Biostatistics Methodology skills: High dimensional reduction, Linear and Logistic Regression with Regularization, Survival Analysis, Longitudinal and Multilevel Data Analysis, Factor Analysis, Structural Equation Modeling and Causal Inference
- Programming skills: SAS, STATA, R, Python, SQL
- Certifications: Maryland Health Insurance Certified Application Counselor