# Bethany K. Hung

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# **EDUCATION**

Johns Hopkins University School of Medicine • August 2019–May 2023 M.D. Program

Brown University • September 2015–May 2019

Cognitive Neuroscience Sc.B. with honors

# **RESEARCH EXPERIENCES**

## Neurosurgery Research with Dr. Ali Bydon • Jan. 2022-present

- Department of Neurosurgery, Johns Hopkins Medicine PI: Ali Bydon, MD
  - Manuscript in progress on how affective disorders effect elective spine surgery outcomes

## Neurosurgery Spinal Research Laboratory • Feb. 2020-present

Department of Neurosurgery, Johns Hopkins Medicine • PI: Daniel Sciubba, MD MBA

- Helped create the largest database of primary spinal tumors and spinal metastases within Hopkins Medicine
- · Led project on racial and socioeconomic disparities in outcomes, using aforementioned database
- Led the creation of the current largest spinal subependymoma case series from multiple institutions
- Assisted in development of new protocol for the collection of patient-reported outcomes from Hopkins Neurosurgery patients

#### Department of the History of Medicine • Nov. 2019-present

Institute of the History of Medicine, Johns Hopkins Medicine • Advisor: Nathaniel Comfort, PhD

- Archival and oral history research on the evolution of spina bifida treatment alongside, and enmeshed within, the U.S. disability rights movement of the 1970s
- Awarded the Hugh Hawkins Fellowship for the study of the history of Hopkins Medicine

# **COMMUNITY SERVICE & LEADERSHIP**

## Student Curricular Review Team for Equity, Co-Director • Dec. 2019-Apr. 2021

- Collected and compiled student feedback on social equity aspects of the entire JHUSOM pre-clinical curriculum
- Hosted town halls where students discussed positive and negative feedback
- Wrote up and presented our findings in a concise report for faculty for each block, with discrete recommendations reflective of the feedback

## Arts in Medicine Society, Co-President • Feb. 2020-Aug. 2021

- Designed Panacea 2020, the organization's annual magazine showcasing student artwork
- Collected submissions across Johns Hopkins Medicine for Panacea

#### Neurosurgery Interest Group, leadership • Aug. 2020-Aug. 2021

• Coordinated and developed a curriculum of events to connect medical students with neurosurgical faculty

## Johns Hopkins SOURCE Service Scholars, Scholar • Sep. 2019–Apr. 2020

• Collaborated with Hopkins Medicine for the Greater Good to implement a Lay Health Educators program at New Song Community Learning Center, a charter school in the Sandtown-Winchester neighborhood of Baltimore City (project unfortunately canceled due to COVID-19)

## Incarceration Health Justice Collective, leadership • Nov. 2019-present

Organized and taught class for first-year medical students about incarceration and health inequities within the carceral system

#### Medical Students For Choice, Co-President • Feb. 2020-Dec. 2020

• Coordinated events, trainings, and seminars regarding family planning with GYN/OB faculty

#### Standardized Patient for the Johns Hopkins Anesthesiology Residency • Jun. 2022

• Volunteered as a standardized patient for mock anesthesia OSCEs to enrich residents' learning experiences

#### Community Care Initiative, team member • Jan. 2020-Mar. 2020

• Planned strategies for community outreach for JHUSOM's annual free community health fair (*unfortunately canceled due to COVID-19*)

## **PUBLICATIONS**

Campagnoli C, **Hung B**, Domini F. Explicit and implicit depth-cue integration: Evidence of systematic biases with real objects. *Vision Res.* 2022;190:107961. doi:10.1016/j.visres.2021.107961

Patel J, Pennington Z, Hersh AM, **Hung B**, Schilling A, Antar A, Elsamadicy AA, Ramos RG, Lubelski D, Larry Lo SF, Sciubba DM. Drivers of Readmission and Reoperation After Surgery for Vertebral Column Metastases. *World Neurosurg*. 2021 Oct;154:e806-e814. doi: 10.1016/j.wneu.2021.08.015.

Hersh A, Pennington Z, **Hung B**, Patel J, Goldsborough E, Schilling A, Feghali J, Antar A, Srivastava S, Botros D, Elsamadicy A, Lo S, Sciubba D. Comparison of frailty metrics and the Charlson Comorbidity Index for predicting adverse outcomes in patients undergoing surgery for spine metastases [published online ahead of print, 2021 Nov 26]. *J Neurosurg Spine*. 2021;1-9. doi:10.3171/2021.8.SPINE21559

Patel J, Pennington Z, Hersh A, **Hung B**, Schilling A, Antar A, Lo S, Sciubba D. Survival Amongst Patients with Lung Metastases to the Spine by Mutational Status: An Investigational Study. *Neurospine*. Under review.

Patel J, Pennington Z, Hersh A, **Hung B**, Sciubba D, Lo S. Mucormycosis of the Spine: A Case Report and Review of the Literature. *Cureus*. 2022;14(3):e23623. Published 2022 Mar 29. doi:10.7759/cureus.23623

**Hung B**, Pennington Z, Hersh A, Schilling A, Ehresman J, Patel J, Antar A, Porras T, Elsamadicy A, Sciubba D. Impact of Race on Nonroutine Discharge, Length of Stay, and Postoperative Complications After Surgery for Spinal Metastases. *J Neurosurg Spine*. 2021;36(4):678-685. Published 2021 Nov 5. doi:10.3171/2021.7.SPINE21287

Hersh AM, Pennington Z, Schilling AT, Porras J, **Hung B**, Antar A, Patel J, Lubelski D, Feghali J, Goodwin CR, Lo SL, Sciubba DM. Plastic surgery wound closure following resection of spinal metastases. *Clin Neurol Neurosurg.* 2021 Aug;207:106800. doi: 10.1016/j.clineuro.2021.106800.

Hersh AM, Feghali J, **Hung B**, Pennington Z, Schilling A, Antar A, Patel J, Ehresman J, Cottrill E, Lubelski D, Elsamadicy AA, Goodwin CR, Lo SL, Sciubba DM. A Web-Based Calculator for Predicting the Occurrence of Wound Complications, Wound Infection, and Unplanned Reoperation for Wound Complications in Patients Undergoing Surgery for Spinal Metastases. *World Neurosurg*. 2021 Aug 14:S1878-8750(21)01211-0. doi: 10.1016/ j.wneu.2021.08.041.

Pennington Z, Ehresman J, Schilling A, Feghali J, Hersh AM, **Hung B**, Kalivas EN, Lubelski D, Sciubba DM. Influence of tranexamic acid use on venous thromboembolism risk in patients undergoing surgery for spine tumors. *J Neurosurg Spine*. 2021 Aug 13:1-11. doi: 10.3171/2021.1.SPINE201935.

Schilling A, Pennington Z, Ehresman J, Hersh A, Srivastava S, **Hung B**, Botros D, Cottrill E, Lubelski D, Goodwin CR, Lo SF, Sciubba DM. Impact of Multidisciplinary Intraoperative Teams on Thirty-Day Complications After Sacral Tumor Resection. *World Neurosurg*. 2021 Aug;152:e558-e566. doi: 10.1016/j.wneu.2021.06.040.

Hung B, Pennington Z, Sciubba DM. Neuroblastoma of the Lumbar Spine. *World Neurosurg*. 2021 Jul;151:2-4. doi: 10.1016/j.wneu.2021.03.137.

Porras JL, Pennington Z, **Hung B**, Hersh A, Schilling A, Goodwin CR, Sciubba DM. Radiotherapy and Surgical Advances in the Treatment of Metastatic Spine Tumors: A Narrative Review. *World Neurosurg*. 2021 Jul;151:147-154. doi: 10.1016/j.wneu.2021.05.032.

Feghali J, Pennington Z, **Hung B**, Hersh A, Schilling A, Ehresman J, Srivastava S, Cottrill E, Lubelski D, Lo S, Sciubba D. A Web-Based Calculator for Clinical Outcome Prediction in Sacral Tumor Surgery. *Journal of Neurosurgery: Spine*. Under review.

Feghali J, Pennington Z, **Hung B**, Hersh A, Schilling A, Ehresman Jeff, Srivastava S, Cottrill E, Lubelski D, Lo D, Sciubba D. Sacrectomy for sacral tumors: Perioperative outcomes in a large-volume comprehensive cancer center. *Spine J*. Published 2021 May 14. doi: 10.1016/j.spinee.2021.05.004

Pennington Z, Schilling A, Cotrill E, Hersh A, **Hung B**, Sciubba D. Minimally invasive circumferential decompression for metastatic vertebral column disease. *Seminars in Spine Surgery*. 2021 Mar. doi: 10.1016/j.semss.2021.100852.

Ehresman J, Lubelski D, Pennington Z, **Hung B**, Ahmed AK, Azad TD, Lehner K, Feghali J, Buser Z, Harrop J, Wilson J, Kurpad S, Ghogawala Z, Sciubba DM. Utility of prediction model score: a proposed tool to standardize the performance and generalizability of clinical predictive models based on systematic review. *J Neurosurg Spine*. 2021 Feb 26:1-9. doi: 10.3171/2020.8.SPINE20963.

Pennington Z, Ehresman J, Feghali J, Schilling A, Hersh A, **Hung B**, Lubelski D, Sciubba DM. A clinical calculator for predicting intraoperative blood loss and transfusion risk in spine tumor patients. *Spine J.* 2021 Feb;21(2):302-311. doi: 10.1016/j.spinee.2020.09.011.

Ehresman J, Pennington Z, Feghali J, Schilling A, Hersh A, **Hung B**, Lubelski D, Sciubba DM. Predicting nonroutine discharge in patients undergoing surgery for vertebral column tumors. J Neurosurg Spine. 2020 Nov 20:1-10. doi: 10.3171/2020.6.SPINE201024.

He WY, El Eter L, Yesantharao P, **Hung B**, Owens H, Persing S, Sacks JM. Complications and Patient-reported Outcomes after TRAM and DIEP Flaps: A Systematic Review and Meta-analysis. Plast Reconstr Surg Glob Open. 2020 Oct 29;8(10):e3120. doi: 10.1097/GOX.00000000003120.

Norcia AM, Yakovleva A, **Hung B,** Goldberg JL. Dynamics of Contrast Decrement and Increment Responses in Human Visual Cortex. *Transl Vis Sci Technol.* 2020 Sep 4;9(10):6. doi: 10.1167/tvst.9.10.6.

# **PRESENTATIONS**

Lin S, Madan V, **Hung B**, Jedrych J, Ng E. Characteristics of Transected Melanomas on Diagnostic Biopsy. Abstract submitted for consideration for the 2023 AAD Annual Meeting, March 2023.

Hersh A, Feghali J, **Hung B**, Pennington Z, Schilling A, Antar A, Patel J, Ehresman J, Lubelski D, Goodwin CR, Sciubba D. A Web-based Calculator for Wound Complications After Metastatic Spine Tumor Surgery. 2021 AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves Annual Meeting, July 2021.

Feghali J, Pennington Z, **Hung B**, Hersh A, Schilling A, Ehresman J, Srivastava S, Cottrill E, Lubelski D, Lo S, Sciubba D. A Web-Based Calculator for Clinical Outcome Prediction in Sacral Tumor Surgery. 2021 AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves Annual Meeting, July 2021.

**Hung B**, Comfort N. Between Eradication and Cure: Spina Bifida History as Told Through Medicine and Disability Studies. Johns Hopkins University Medical Student Research Symposium: Zoom, February 2021.

Hung B, Chang H. Panacea: A Student-Led Arts Magazine. Western Humanities: Zoom, September 2020.

He W, Yesantharao P, Owens H, **Hung B**, Leen EE, Sacks J. A Systematic Review Of The Impact Of Timing On Complications In TRAM And DIEP Flap Reconstructions [ePoster]. Plastic Surgery Research Council: Toronto, May 2020.

# **AWARDS & SCHOLARSHIPS**

- Hugh Hawkins Research Fellowship for the Study of Hopkins History, Johns Hopkins University 2020
- Podium speaker, Johns Hopkins University Medical Student Research Symposium 2021
- SOURCE Service Scholar, Johns Hopkins University 2019

# **INTERESTS & HOBBIES**

- Knitting
- Graphic design
- Assembling IKEA furniture