

CURRICULUM VITAE TOBY CHARLES CORNISH, M.D., Ph.D.

I. PERSONAL INFORMATION

Current Position:

Associate Professor, University of Colorado School of Medicine
Vice-Chair for Informatics, Department of Pathology, University of Colorado
Medical Director of Informatics, Department of Pathology, University of Colorado
Medical Director of the Laboratory Information System, UCHealth System

Contact Information:

Business Address: University of Colorado Anschutz Medical Campus
Department of Pathology
Academic Office 1, Room L15-2109
Mail Stop B216
12631 East 17th Avenue
Aurora, CO 80045

E-mail: toby.cornish@cuanschutz.edu

ORCID ID: [0000-0002-1902-2109](https://orcid.org/0000-0002-1902-2109)

ResearcherID: [A-4394-2015](https://pubs.rsos.royalsocietypublishing.org/author/A-4394-2015)

Scopus Author ID: [35326607400](https://orcid.org/35326607400)

ISNI: [0000000125723748](https://orcid.org/0000000125723748)

II. EDUCATION AND TRAINING

1995	B.S.	Bradley University, Peoria, IL	Biochemistry
2004	Ph.D.	University of Illinois, Urbana, IL	Neuroscience
2005	M.D.	University of Illinois, Chicago, IL	Medicine
2006	Intern	Johns Hopkins Hospital	Anatomic Pathology
2007	Asst. Resident	Johns Hopkins Hospital	Anatomic Pathology
2008	Research Fellow	Johns Hopkins University	Pathology
2009	Resident	Johns Hopkins Hospital	Anatomic Pathology
2010	Clinical Fellow	Johns Hopkins Hospital	GI & Liver Pathology
2011	Certificate	Johns Hopkins University	Clinical Informatics

III. ACADEMIC APPOINTMENTS

July 2010 - Jun 2011	Assistant (Faculty), GI & Liver Pathology	JHU School of Medicine
July 2011 - Jan 2016	Assistant Professor, Pathology	JHU School of Medicine
Jan 2016 - Present	Adjunct Assistant Professor, Pathology	JHU School of Medicine
Jan 2016 - Jun 2017	Visiting Associate Professor, Pathology	University of Colorado School of Medicine
July 2017 - Present	Associate Professor, Pathology	University of Colorado School of Medicine

IV. OTHER PROFESSIONAL POSITIONS

Hospital positions:

July 2010 - Jan 2016	Pathologist	Johns Hopkins Hospital
July 2010 - Jan 2016	Pathologist	Johns Hopkins Bayview Medical Center
July 2012 - Jan 2016	Pathologist	Howard County General Hospital
July 2014 - Jun 2015	Associate Director	Division of Informatics, Pathology Department, JHU Hospital
July 2015 - Jan 2016	Interim Director	Division of Informatics, Pathology Department, JHU Hospital
Jan 2016 - Present	Medical Director of Informatics	Department of Pathology, University of Colorado School of Medicine
Jan 2016 - Present	Medical Director of the LIS	UC Health System
Jan 2016 - Present	Pathologist	University of Colorado Hospital
Sep 2018 - Jul 2021	Medical Director of Clinical Informatics, Pathology and Lab Medicine	Children's Hospital Colorado

Consultantships:

2010	Consultant	Hamamatsu, Inc
2010 - 2014	Sci. Advisory Board	Digipath, Inc.
2012 - 2013	Sci. Advisory Board	Accelpath, Inc.
2013	Consultant	Virginia Hospital Center
2015	Consultant	Guidepoint Global

Other:

2011 - 2012	Member, Aperio, Inc. Repository Project Advisory Group
2012 - 2016	Co-director, Imaging and Image Analysis, Oncology Tissue Services Lab (formerly the Tissue Microarray Lab), JHU
2015 - 2017	Member, Advisory Panel, Digital Pathology Congress
2016 - present	Member, American Registry of Pathology Editorial Advisory Board, Next Generation of ARP Publications (5th Series)
2017 - 2018	Member, Epic Systems Corp. Pathology Steering Board
2017 - 2019	Section Editor (Informatics), Editorial Board, <i>American Journal of Clinical Pathology</i>
2017 - 2019	Member, Leica, Inc. Pathology Imaging Advisory Board
2017 - present	Member, Cerner Corp. CoPathPlus Pathology Advisory Committee
2019 - present	Associate Editor (Informatics), Editorial Board, <i>American Journal of Clinical Pathology</i>
2019 - present	Member, Leica, Inc. Advanced Staining and Imaging Advisory Board

- 2019 - 2020 Member, Editorial Advisory Board, *Springer Lecture Notes in Artificial Intelligence: State-of-the-Art Survey: AI/Machine Learning for Digital Pathology*
- 2021 Member, Bristol Meyers Squibb, Ozanimod (ZEPOSIA®) Advisory Board: GI Pathologists' Insights on True North Biopsy Data and Real-World Biopsy Data Reporting to Guide Future BMS Trials

V. HONORS, SPECIAL RECOGNITIONS AND AWARDS

- 1998 - 1999 Program in Arms Control, Defense and International Security Research Fellowship (University of Illinois, Urbana-Champaign)
- 2000 University Fellowship (University of Illinois, Urbana-Champaign)
- 2000 - 2002 Developmental Neuroscience and Psychobiology Training Grant Fellow (NIH; University of Illinois, Urbana-Champaign)
- 2004 Daniel K. and Frances Bloomfield Award ("Outstanding Student Entering the Last Year of Studies in the Medical Scholars Program," University of Illinois, Urbana-Champaign College of Medicine)
- 2005 Donald Thrush Award for Excellence in Pathology (University of Illinois, Urbana-Champaign College of Medicine)
- 2008 Excellence in Basic Research, Pathology Young Investigators (JHU)
- 2008 College of American Pathologists Travel Grant, APIII (Advancing Practice, Instruction, and Innovation through Informatics) Meeting
- 2009 - 2010 Ruth L. Kirchstein NRSA Fellowship (JHU training grant)
- 2010 Excellence in Clinical Research, Pathology Young Investigators (JHU)
- 2010 - 2011 Yardley Fellow (Division of GI & Liver Pathology, JHU)
- 2012 Dr. Frank Netter Award for Special Contributions to Medical Education (Vesalius Trust)
- 2012 Grover Hutchins, M.D., Endowment, Faculty Support Award (JHU)
- 2014 Educational Innovation Award, Institute for Educational Excellence (JHU SOM)
- 2019 Summit Award for Excellence in Teaching and the Education of Pathologists (CU SOM Pathology Dept)
- 2020 Medical Student Small Group Teaching Certificate ("Awarded in recognition of exceptional service in teaching 10 or more small group sessions by a faculty member"; CU SOM Pathology Dept)
- 2020 The Power List 2020, "Big Breakthroughs", *The Pathologist Magazine*
- 2021 Medical Student Small Group Teaching Certificate ("Awarded in recognition of exceptional service in teaching 6 or more small group sessions by a faculty member"; CU SOM Pathology Dept)

VI. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- 2005 - present Member, United States and Canadian Academy of Pathology (USCAP)
- 2006 - present Member, College of American Pathologists (CAP)
- 2006 - present Member, American Society for Clinical Pathology (ASCP)
- 2007 - present Member, Association for Pathology Informatics (API)
- 2009 - 2011 Member, American Association for Cancer Research (AACR)
- 2012 - present Member, Digital Pathology Association (DPA)
- 2015 - 2016 Member, American Medical Informatics Association (AMIA)

2016 - present	Member, American Telemedicine Association (ATA)
2018 - present	Member, Gastrointestinal Pathology Society (GIPS)
2019 - present	Member, Healthcare Information and Management Systems Society (HIMSS)
2019 - present	Member, Society for Imaging Informatics in Medicine (SIIM)
2019 - present	Member, Pathology Innovation Collaborative Community (PICC)/Alliance for Digital Pathology

VII. MAJOR COMMITTEE AND SERVICE RESPONSIBILITIES

Departmental:

2009 - 2016	Member, Web Site Committee, JHU SOM Pathology Dept
2011 - 2015	Member, Residency Selection Committee, JHU SOM Pathology Dept
2014 - 2015	Associate Director, Division of Informatics, JHU SOM Pathology Dept
2015 - 2016	Interim Director, Division of Informatics, JHU SOM Pathology Dept
2016 - present	Medical Director, Pathology Informatics, CU SOM Pathology Dept
2017 - present	Chairperson, Web Site Committee, CU SOM Pathology Dept
2019 - 2021	Co-Chairperson, Colorado Genetic Laboratory (CGL) & Colorado Molecular Correlates Laboratory (CMOCO) LIS Search Committee, CU SOM Pathology Department
2021 - present	Vice-Chair for Informatics, CU SOM Pathology Dept
2021 - present	Member, AP/CP Program Evaluation Committee, CU SOM Pathology Dept
2021 - present	Chairperson, Subcommittee on Technology for Education, AP/CP Program Evaluation Committee, CU SOM Pathology Dept
2022 - present	Member, AP/CP Curriculum Committee, CU SOM Pathology Dept
2022 - present	Member, Vice-Chair for Clinical Pathology and Laboratory Medical Director Recruitment Committee, CU SOM Pathology Dept

University / School of Medicine:

2010 - 2014	Member, caTissue Steering Committee, JHU SOM
2011 - 2016	Member, Education Technology Committee, JHU SOM
2012 - 2016	Co-director, Imaging and Image Analysis, Oncology Tissue Services Lab (formerly the Tissue Microarray Lab), JHU SOM
2014 - 2016	Member, OpenSpecimen Steering Committee, JHU SOM
2021 - present	Member, Center for Health Artificial Intelligence (CHAI), CU SOM
2022 - present	Affiliate Member, University of Colorado Cancer Center

Hospital / Health System:

2009 - 2010	GI Biopsy Quality Improvement Effort, Johns Hopkins Hospital
2010 - 2016	GI Pathology Interesting Case/Quality Assurance Conference, Johns Hopkins Hospital
2011 - 2016	PDS/Pathology Information Systems Steering Committee, Johns Hopkins Hospital
2012	Member, College of American Pathologists Laboratory Accreditation Inspection Team, Johns Hopkins Hospital
2015 - 2016	Autopsy Pathology Quality Assurance Conference, Johns Hopkins Hospital
2015 - 2016	Member, Health IT Safety Committee, Johns Hopkins Medicine

2015 - 2016	Epic Physician Champions (Pathology Representative), Johns Hopkins Medical Institutions
2015 - 2016	Member, Data Trust Research Data Sub-Council, Johns Hopkins Medicine
2015 - 2016	Member, Laboratory Advisory Committee, Johns Hopkins Hospital
2015 - 2016	Member, Clinical Advisory/Laboratory Management Committee, Johns Hopkins Department of Pathology
2016 - present	Member, Joint Informatics Group, UC Health
2016 - present	Member, LIS Steering Committee, UC Health
2016 - present	Medical Director, Laboratory Information System, UC Health
2016 - present	Member, Pharmacogenomics Implementation Committee Colorado (PICColo), CU / UCHealth
2018 - 2021	Medical Director of Clinical Informatics, Pathology and Lab Medicine, Children's Hospital Colorado (CHCO)

Clinical (Service) Responsibilities:

2010 - 2016	Gastrointestinal pathology, Johns Hopkins Hospital
2011 - 2016	Autopsy pathology, Johns Hopkins Hospital
2011 - 2016	Autopsy pathology, Johns Hopkins Bayview Medical Center
2012 - 2016	Gastrointestinal pathology, Howard County General Hospital
2016 - present	Gastrointestinal pathology, University of Colorado Hospital
2016 - 2021	Gastrointestinal pathology, UCHealth Broomfield Hospital
2016 - 2018	Gastrointestinal pathology, UCHealth Grandview Hospital
2020 - present	Gastrointestinal pathology, UCHealth Cherry Creek Medical Center

Professional Society:

2012 - 2013	Member, College of American Pathologists Digital Pathology Working Group
2013 - 2014	Member, College of American Pathologists Digital Pathology Project Team
2014 - 2019	Member, College of American Pathologists Digital Pathology Committee
2017 - 2018	Member, AACR 2018 Annual Meeting Program Committee
2018 - 2019	Co-chair, Association for Pathology Informatics Training and Education Committee
2019 - 2020	Member, College of American Pathologists Digital and Computational Pathology Committee
2019 - 2020	Member, HIMSS-SIIM Enterprise Imaging Community's Multimedia Interactive Content Reporting Workgroup
2020 - present	Member, HIMSS-SIIM Enterprise Imaging Community Advisory Council
2020 - present	Member, Digital Pathology Association Artificial Intelligence / Machine Learning (AI/ML) Task Force
2021	President-Elect, Association for Pathology Informatics
2021 - present	Member, College of American Pathologists Artificial Intelligence Committee
2022	President, Association for Pathology Informatics

VIII. LICENSURE AND BOARD CERTIFICATION

Licensure:

2008 - 2010	Medical Physician and Surgeon, Commonwealth of Pennsylvania,
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MD435996 (status: inactive)
 2010 - 2016 Medical Physician and Surgeon, State of Maryland, D70746 (status: inactive)
 2015 - present Physician, State of Colorado, DR.0056128

Board Certification:

2009 - 2029 Diplomate, Anatomic Pathology, The American Board of Pathology
 2015 - 2025 Diplomate, Clinical Informatics, The American Board of Pathology

IX. INVENTIONS, PATENTS, INTELLECTUAL PROPERTY

2015 Halushka MK and **Cornish TC**. "Method and System to Digitize Pathology Slides in a Stepwise Fashion for Review", Co-inventor (with Marc K. Halushka), US Patent 9,214,019; filed Feb 15, 2012, and issued Dec 15, 2015.

X. REVIEW AND REFEREE WORK

Editorial Board Service:

2017 - 2019	Section Editor	<i>American Journal of Clinical Pathology</i> (Informatics, GI & Liver Pathology)
2019 - present	Associate Editor	<i>American Journal of Clinical Pathology</i> (Informatics)
2019 - present	Editorial Advisory Board	<i>American Registry of Pathology, Fascicles of Pathology, 5th Series</i>
2019 - 2020	Editorial Advisory Board	<i>Springer Lecture Notes in Artificial Intelligence: State-of-the-Art Survey: AI/ML for Digital Pathology</i>
2020 - present	Editorial Board	<i>Modern Pathology</i>

Ad-hoc Review for Journals:

2009	Ad-hoc Reviewer	<i>Annals of the British Machine Vision Association</i>
2010 - 2015	Ad-hoc Reviewer	<i>Laboratory Investigation</i>
2012	Ad-hoc Reviewer	<i>Diagnostic Cytopathology</i>
2012	Ad-hoc Reviewer	<i>Journal of Neuropathology and Exp Neurology</i>
2013 - 2020	Ad-hoc Reviewer	<i>Archives of Pathology & Laboratory Medicine</i>
2014 - present	Ad-hoc Reviewer	<i>Journal of Pathology Informatics</i>
2014	Ad-hoc Reviewer	<i>Journal of Visualized Experiments</i>
2015	Ad-hoc Reviewer	<i>AIMS Medical Science</i>
2015	Ad-hoc Reviewer	<i>Scientific Reports</i>
2015	Ad-hoc Reviewer	<i>Advances in Medical Sciences</i>
2016	Ad-hoc Reviewer	<i>Microscopy and Microanalysis</i>
2017 - 2019	Ad-hoc Reviewer	<i>Pathology</i>
2017 - present	Ad-hoc Reviewer	<i>American Journal of Clinical Pathology</i>
2017 - 2020	Ad-hoc Reviewer	<i>Journal of Clinical Investigation</i>
2018	Ad-hoc Reviewer	<i>JAMA Oncology</i>
2018	Ad-hoc Reviewer	<i>Clinical Medicine Insights: Pathology</i>
2018	Ad-hoc Reviewer	<i>Histopathology</i>
2019 - 2020	Ad-hoc Reviewer	<i>Modern Pathology</i>

2019	Ad-hoc Reviewer	<i>JAMA Network Open</i>
2019	Ad-hoc Reviewer	<i>Research Square</i>
2019	Ad-hoc Reviewer	<i>npj Digital Medicine</i>
2020	Ad-hoc Reviewer	<i>Medical Image Analysis</i>
2020 - 2021	Ad-hoc Reviewer	<i>Clinical Chemistry</i>
2020	Ad-hoc Reviewer	<i>Human Pathology: Case Reports</i>
2020	Ad-hoc Reviewer	<i>Mayo Clinic Proceedings: Innovations, Quality & Outcomes</i>
2021	Ad-hoc Reviewer	<i>Journal of the American Medical Informatics Association (JAMIA)</i>
2021 - 2022	Ad-hoc Reviewer	<i>Journal of Pathology</i>
2021	Ad-hoc Reviewer	<i>Journal of Pathology: Clinical Research</i>
2021	Ad-hoc Reviewer	<i>American Journal of Pathology</i>
2021	Ad-hoc Reviewer	<i>Journal for ImmunoTherapy of Cancer</i>
2021	Ad-hoc Reviewer	<i>Computerized Medical Imaging and Graphics</i>
2022	Ad-hoc Reviewer	<i>Future Medicinal Chemistry</i>
2022	Ad-hoc Reviewer	<i>Translational Oncology</i>
2022	Ad-hoc Reviewer	<i>Gastroenterology</i>
2022	Ad-hoc Reviewer	<i>International Journal of Computer-Assisted Radiology and Surgery (IJCARS)</i>
2022	Ad-hoc Reviewer	<i>Biomedicines</i>
2022	Ad-hoc Reviewer	<i>Cybernetics and Systems</i>

Grant Review:

2019	External Reviewer	Mitacs Elevate Postdoctoral Fellowship Award Program
2019	External Reviewer	Ontario Research Fund – Research Excellence Round 10
2020	External Reviewer	Ontario Institute for Cancer Research (OICR) - Ontario Molecular Pathology Research Network (OMPRN) Cancer Pathology Translational Research Grants (CPTRG)
2021	Expert Reviewer	Canada Foundation for Innovation (CFI) - John R. Evans Leaders Fund
2021	Member	NIH Emerging Imaging Technologies and Applications (EITA) Study Section
2021	Member	Colorado Clinical and Translational Sciences Institute (CCTSI) Translational Methods (TM-Pilot) Grant Program Study Section
2022	Expert Reviewer	Swiss National Science Foundation (SNSF) National Roadmap for Research Infrastructures 2023

Scientific Meeting Abstract / Proposal Review:

2019	Reviewer	Pathology Informatics Summit Abstracts
2020	Reviewer	Pathology Informatics Summit Abstracts
2021	Reviewer	SIIM 2022 Annual Meeting Session Proposals
2021	Reviewer	SIIM 2022 Annual Meeting Abstracts
2022	Reviewer	ASCP 2022 Annual Meeting Abstracts

XI. INVITED EXTRAMURAL LECTURES, PRESENTATIONS AND VISITING PROFESSORSHIPS

Local:

1. "From Pushing Glass to Pushing Bits," presented at Grand Rounds, Department of Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 11/23/2015.
2. "Artificial Intelligence in Histopathology," presented at Grand Rounds, Department of Pathology, University of Colorado, Aurora, CO, 3/4/2022.
3. "Pathology Informatics," presented at the Department of Biomedical Informatics Retreat, University of Colorado, Aurora, CO, 8/30/2022.

Regional:

1. "Cultured Cells Respond to Substrate-Attached Synaptic Differentiation Cues," presented at the Midwest Developmental Biology Meeting in Urbana, IL, 2000.

National:

1. "Pancreatic cancer precursors: early detection," presented at Grand Rounds, Department of Pathology, Medical College of Wisconsin, Milwaukee, WI, 8/27/2010.
2. "Summarize the Basic Concepts in Digital Pathology and Image Analysis," 12th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 11/10/2012.
3. "Test Utilization in GI and Liver Pathology," 12th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 11/10/2012.
4. "A Practical Introduction to Digital Pathology," 13th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 10/26/2013.
5. "Test Utilization in GI and Liver Pathology," 13th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 10/26/2013.
6. "The Promise and Challenges of mPathology," presented at The Emerging Clinical & Laboratory Diagnostics Conference, American Association for Clinical Chemistry, San Jose, CA, 4/24/2014.
7. "Panel Discussion HER2 Testing: Multi-institutional Perspectives," 14th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 10/11/2014.

8. "Practical Pediatric Gastrointestinal Pathology," 14th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 10/12/2014.
9. "CAP Digital Pathology Committee Update," presented at Pathology Visions 2014, Digital Pathology Association, San Francisco, CA, 10/20/2014.
10. "Is In-Sourcing for me? -- Selection and Implementation of a Digital Pathology Consultation Platform," presented at Pathology Visions 2014, Digital Pathology Association, San Francisco, CA, 10/21/2014.
11. "Approaches to and Perspectives on Digital Insourcing of Pathology Consultation and Second Opinion," presented at Digital Pathology Congress USA, San Diego, California, 6/23/2015.
12. "From Pushing Glass to Pushing Bits," presented to Department of Pathology, University of Colorado School of Medicine, Aurora, Colorado, 7/9/2015.
13. "Practical Pediatric Gastrointestinal Pathology," 15th Annual Current Topics in Gastrointestinal and Liver Pathology, Johns Hopkins School of Medicine, Baltimore, MD, 10/17/2015.
14. "8003. In-Sourcing Digital Consults: Is it For Me?" American Society for Clinical Pathology (ASCP) Annual Meeting, Long Beach, CA, 10/28/2015.
15. "8005. A Primer on Regulatory and Legal Aspects of Whole Slide Imaging and Telepathology," American Society for Clinical Pathology (ASCP) Annual Meeting, Long Beach, CA, 10/29/2015.
16. "Selection and Implementation of a Digital Pathology System," Key Topics in Pathology Informatics Workshop, Pathology Informatics Summit 2016, Pittsburgh, PA, 5/23/2016.
17. "API4-16. Use of Digital Pathology for Establishing a Consultation Practice," American Society for Clinical Pathology (ASCP) Annual Meeting, Las Vegas, NV, 9/14/2016.
18. "The Current and Future State of Digital Pathology," American Association of Pathologists' Assistants Spring Meeting, Denver, CO, 3/22/2017.
19. "API8-17. Beyond the FDA: Regulations, Requirements, and Reimbursement in Digital Pathology," American Society for Clinical Pathology (ASCP) Annual Meeting, Chicago, IL 9/7/2017.
20. "Computational Pathology," part of "The Role of Artificial Intelligence in Digital Pathology" webinar presented by *The Pathologist*, broadcast to North America, 12/20/2017.
21. "Computational Pathology," Pathology Informatics Bootcamp, Pathology Informatics Summit 2018, Pittsburgh, PA, 5/21/2018.
22. "Revisiting the 'Gold Standard' in the Era of Computational Pathology," presented to the Division of Anatomic Pathology, Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, Minnesota, 6/15/2018.

23. "Integrating Our Digital Future," presented to PDAS track, Association of Pathology Chairs Annual Meeting, San Diego, CA, 7/18/2018.
24. "Revisiting the 'Gold Standard' in the Era of Computational Pathology," presented to the Department of Pathology, University of Michigan, Ann Arbor, Michigan, 10/24/2018.
25. "Artificial Intelligence and the Practice of Pathology," presented to the Department of Pathology, University of Utah, Salt Lake City, Utah, 3/4/2019.
26. "From Pushing Glass to Pushing Bits: Building a Truly Digital Pathology Workflow," Association for Pathology Informatics Companion Society Meeting, USCAP Annual Meeting, National Harbor, MD, 3/14/2019.
27. "Buy, Build or Borrow? Filling functional gaps in your LIS," Foundational Topics in Pathology and Clinical Laboratory Informatics, Pathology Informatics Summit 2019, Pittsburgh, PA, 5/6/2019.
28. "KiNet: Single-stage Nuclear Recognition and Classification for Measuring Ki-67 Proliferation Index (PI) in Pancreatic Neuroendocrine Tumors," Histopathology Image Analysis (HIMA) Imaging Science, Pathology Informatics Summit 2019, Pittsburgh, PA, 5/6/2019.
29. "The Application of Artificial Intelligence to the Practice of Pathology," Frontiers in Pathology Imaging Informatics Session, Society for Imaging Informatics in Medicine (SIIM) Annual Meeting 2019, Aurora, CO, 6/28/2019.
30. "An Introduction to Artificial Intelligence in the Practice of Pathology," New Frontiers in Cytopathology Lecture, American Society of Cytopathology (ASC) Annual Meeting 2019, Salt Lake City, UT, 11/15/2019.
31. "Short Course 51: Adopting Digital and Computational Pathology in Clinical Practice: A Practical, Technical, Regulatory and Legal Primer," USCAP Annual Meeting 2020, Los Angeles, CA, 3/2/2020.
32. "Multimedia Interactive Reporting in Pathology" in "Enterprise Imaging – Multimedia Interactive Reporting in Imaging Centric Specialties," Course ID: 1010, Society for Imaging Informatics in Medicine (SIIM) Annual Meeting 2020, Virtual Meeting, 6/24/2020.
33. "Artificial Intelligence in Pathology Practice" in "Artificial Intelligence and Machine Learning in Pathology," Association for Pathology Informatics Virtual Classroom Series 2020, 12/9/2020.
34. "Short Course 51: Adopting Digital and Computational Pathology in Clinical Practice: A Practical, Technical, Regulatory and Legal Primer," USCAP Virtual Annual Meeting 2021, 3/14/2021.
35. "Brief Introduction to AI with Definitions," Association for Pathology Informatics Companion Society Meeting, USCAP Virtual Annual Meeting 2021, 3/16/2021.
36. "Application of Pathology Informatics in Cancer Centers," presented at Moffitt Cancer Center, Tampa, Florida, 4/8/2021.

37. "Short Course 51: Adopting Digital and Computational Pathology in Clinical Practice: A Practical, Technical, Regulatory and Legal Primer," USCAP Annual Meeting 2022, 3/23/2022.
38. "Security Panel Discussion," Pathology Informatics Summit 2022, Pittsburgh, PA, 5/12/2022.
39. "Quantitative Analysis of Ki67, a Prognostic Biomarker in Gastroenteropancreatic Neuroendocrine Tumors," Image Guided Cancer Therapy (IGCT) Seminar Series (Virtual), MD Anderson Cancer Center, Houston, Texas, 5/19/2022.
40. "Digital Pathology: Current State, Next Steps, Future Visions," Session ID: 1021S, Society for Imaging Informatics in Medicine (SIIM) Annual Meeting 2022, Kissimmee, FL, 6/9/2022.
41. "Impact of Digital Pathology and Artificial Intelligence on Routine Pathology Practice: To be or Not to be," Session ID: 2029V, Society for Imaging Informatics in Medicine (SIIM) Annual Meeting 2022, Kissimmee, FL, 6/10/2022.

International:

1. "Pancreatic Cancer? There's an App for that," presented at 20th Congress of Chinese Society of Pathology and 4th Annual Meeting of Chinese Pathologists, Chongqing, Sichuan Province, China, 11/15/2014.
2. "Overcoming Barriers in Adoption of Digital Pathology," panel discussion, presented at Digital Pathology Congress, London, England, 12/4/2014.
3. "Global Insourcing of Pathology Consultation and Second Opinion Using Digital Pathology," presented at Digital Pathology Congress, London, England, 12/5/2014.
4. "Global Insourcing of Pathology Consultation and Second Opinion Using Digital Pathology," presented at Royal College of Pathologists Digital Pathology Symposium, Bradford, West Yorkshire, UK, 9/24/2015.
5. "The Future of Digital Pathology in Asia," panel discussion, presented at Digital Pathology Congress Asia, Kuala Lumpur, Malaysia, 8/22/2016.
6. "WSI Telepathology for International Expert Consultation and Second Opinion," presented at Digital Pathology Congress Asia, Kuala Lumpur, Malaysia, 8/23/2016.
7. "Computational Pathology," part of "The Role of Artificial Intelligence in Digital Pathology" webinar presented by *The Pathologist*, broadcast to Europe, 12/19/2017.
8. "Integrating Our Digital Future," presented at Digital Pathology Congress Asia, Tokyo, Japan, 5/9/2018.
9. "Legal and Regulatory Aspects of Telepathology," presented at International Symposium of Innovation in Transplantation: The Digital Era, Verona, Italy, 6/8/2018.

10. "The Current State of Digital Pathology in Clinical Practice," Artificial Intelligence and Digital Pathology Pre-Course, presented at the 11th Asia Pacific International Association of Pathology (APIAP) Congress Hefei, China, 10/11/2019.
11. "Buy, Build or Borrow? Filling Functional Gaps in your LIS," XV Health Informatics Conference: JIS Go Live 2020, Virtual Meeting, Buenos Aires, Argentina, 11/2/2020.

Industry:

1. "Integrating Our Digital Future," presented to Leica Biosystems (Aperio) Associates, Vista, CA, 7/16/2018.
2. "Crossing the Chasm? Adoption of Digital Pathology and Artificial Intelligence in Mainstream Pathology Practice," presented at Pathology Grand Rounds (Virtual Session), AstraZeneca, Gaithersburg, MD, 11/20/2020.

XII. TEACHING RECORD

Undergraduate:

1994 - 1995 Teaching Assistant, "Chemistry Laboratory" (CHEM 110), Bradley University

Graduate / Medical School:

1995 - 1996 Teaching Assistant, "Biochemistry Laboratory" (BCHM 355), University of Illinois Urbana-Champaign School of Chemical Sciences.

1997 - 1998 Teaching Assistant, "Experimental Techniques in Biochemistry" (BCHM 452), University of Illinois Urbana-Champaign School of Chemical Sciences.

2005 - 2010 Small Group Instructor, 2nd Year Medical Student Pathology Course, Johns Hopkins School of Medicine

2009 - 2016 Lecturer, "Pathology Informatics," Pathology Residency Didactic Lecture Series, Johns Hopkins School of Medicine

2010 - 2016 Pathology Demonstration Instructor in Gross Anatomy (1st year medical students), Johns Hopkins School of Medicine

2010 - 2016 Small Group Instructor in Pathology, Genes to Society Curriculum (2nd year medical students), Johns Hopkins School of Medicine

2010 - 2016 Lecturer, "Small Intestine," Genes to Society Curriculum (2nd year medical students), Johns Hopkins School of Medicine

2011 - 2012 Lecturer, "Digital microscopy and quantitative microscopy for research applications and publication," ME:680.712 Phenotyping for Functional Genetics, Johns Hopkins School of Medicine

2012 - 2016 Small Group Instructor in Histopathobiology, Scientific Foundations of Medicine, Genes to Society Curriculum (1st year medical students), Johns Hopkins School of Medicine

2013 Lecturer, "An introduction to digital whole slide imaging and whole slide image analysis," ME:680.712 Phenotyping for Functional Genetics, Johns Hopkins School of Medicine

2014	Visiting Lecturer, "Pancreatic Tumors: An Algorithmic Approach to Diagnosis," Zhejiang University School of Medicine, Hangzhou, Zhejiang Province, China. 11/17/2014.
2014	Visiting Lecturer, "Pancreatic Cancer Precursors and Early Detection of Pancreatic Cancer," Zhejiang University School of Medicine, Hangzhou, Zhejiang Province, China. 11/18/2014.
2014	Visiting Lecturer, "From Pushing Glass to Pushing Bits: An Introduction to Digital Pathology and Image Analysis for Clinical and Research Applications," Zhejiang University School of Medicine, Hangzhou, Zhejiang Province, China. 11/18/2014.
2015	Lecturer, "An introduction to digital whole slide imaging and whole slide image analysis," ME:680.712 Phenotyping for Functional Genetics, Johns Hopkins School of Medicine. 7/31/2015.
2016 - 2021	Small Group Facilitator, "Cardiovascular Pulmonary Renal Block: Pathology," 1st Year Medical Curriculum, University of Colorado School of Medicine.
2016 - 2019	Small Group Facilitator, "Disease & Defense Block," 1st Year Medical Curriculum, University of Colorado School of Medicine.
2016 - 2021	Small Group Facilitator, "GI & Liver Block," Digestion, Endocrine and Metabolic Systems Block, IDPT 6002, 2nd Year Medical Curriculum, University of Colorado School of Medicine.
2017	Preceptor, Foundations of Medicine, University of Colorado School of Medicine.
2017	Preceptor, PATH 8600 Research Elective, University of Colorado School of Medicine.
2017 - 2019	Lecturer, "Diseases of the Lower GI Tract," Digestion, Endocrine and Metabolic Systems Block, IDPT 6002, 2nd Year Medical Curriculum, University of Colorado School of Medicine.
2018 - 2021	Lecturer, "Neoplasms of the Lower GI Tract," Digestion, Endocrine and Metabolic Systems Block, IDPT 6002, 2nd Year Medical Curriculum, University of Colorado School of Medicine.
2021 - present	Lecturer, "Pathology of GI Polyps & Carcinoma: Part 1, GI Polyps," Plains - Gastrointestinal Systems Course, IDPT 5018-A11P, Medical Sciences (Plains) level, 1st Year Medical Curriculum, University of Colorado School of Medicine.
2021 - present	Small Group Facilitator, Plains - Gastrointestinal Systems Course, IDPT 5018-A11P, Medical Sciences (Plains) level, 1st Year Medical Curriculum, University of Colorado School of Medicine.

Resident:

2010	Presenter, "Pancreatic Tumors," slide-based unknowns conference, Medical College of Wisconsin, Milwaukee, WI (8/26/2010)
2013 - 2016	Lecturer, "Pediatric GI Pathology," Pathology Residency Didactic Lecture Series, Johns Hopkins School of Medicine
2018 - 2020	Lecturer, "Introduction to Pathology Informatics," Pathology Residency Didactic Lecture Series, CU School of Medicine
2021 - present	Lecturer, "Introduction to Laboratory Information Systems," Pathology Residency Immersion Block, CU School of Medicine
2021 - present	Lecturer, "Overview of Pathology Informatics," Pathology Residency Didactic Lecture Series, CU School of Medicine (12/13/2021)

Fellow:

- 2019 Lecturer, "LIS Implementation/Selection," Lab Management Lecture Series, Pediatric Pathology Fellowship, Children's Hospital Colorado, Aurora, CO (9/18/2019)
- 2021 Lecturer, "LIS Selection and Implementation," Lab Management Lecture Series, Pediatric Pathology Fellowship, Children's Hospital Colorado, Aurora, CO (1/20/2021)
- 2021 Lecturer, "LIS Selection and Implementation," Lab Management Lecture Series, Pediatric Pathology Fellowship, Children's Hospital Colorado, Aurora, CO (10/29/2021)

Clinical instruction:

- 2010 - 2016 Instruction of pathology residents and fellows rotating on the Gastrointestinal Pathology service, Johns Hopkins School of Medicine
- 2011 - 2016 Instruction of pathology residents on the Autopsy Pathology service, Johns Hopkins School of Medicine
- 2012 - 2016 Instruction of pathology residents on the Pathology Informatics elective, Johns Hopkins School of Medicine
- 2016 - present Instruction of pathology residents and fellows rotating on the Gastrointestinal Pathology service, University of Colorado School of Medicine
- 2016 - 2017 Course director and instructor, Pathology Informatics Elective, University of Colorado School of Medicine
- 2018 - present Course director and instructor, Pathology Informatics Rotation, University of Colorado School of Medicine

Workshops/Seminars:

- 2011 Lecturer, "Digital microscopy and quantitative microscopy for research applications and publication," 2011 Mouse Pathobiology and Phenotyping Short Course, (concurrent with ME:680.712), Johns Hopkins School of Medicine, Baltimore, MD (7/29/2011)
- 2012 Lecturer, "Digital microscopy and quantitative microscopy for research applications and publication," 2012 Mouse Pathobiology and Phenotyping Short Course, (concurrent with ME:680.712), Johns Hopkins School of Medicine, Baltimore, MD (8/3/2012)
- 2013 Lecturer, "An introduction to digital whole slide imaging and whole slide image analysis," 2013 Mouse Pathobiology and Phenotyping Short Course, (concurrent with ME:680.712), Johns Hopkins School of Medicine, Baltimore, MD (7/19/2013)
- 2015 Lecturer, "An introduction to digital whole slide imaging and whole slide image analysis," ME:680.712 Phenotyping for Functional Genetics, Johns Hopkins School of Medicine (7/31/2015)
- 2017 "RT2017THUR Beyond the FDA: Discussing Digital Pathology with Primary Dx," American Society for Clinical Pathology (ASCP) Annual Meeting, Chicago, IL (9/7/2017).

- 2018 "The Role of the LIS in Digital Pathology: Driver, Passenger or Bystander?" Pathology Visions (Digital Pathology Association Annual Meeting), San Diego, CA (11/5/2018).
- 2018 "Artificial Intelligence and the Practice of Pathology" Association for Pathology Informatics (API) Digital Pathology and AI Workshop 2.0, Columbus, OH (12/8/2018).
- 2019 "Artificial Intelligence and Digital Pathology: What Pathologists Need to Know" Association for Pathology Informatics (API) Digital Pathology and AI Workshop 3.0, Pittsburg, PA (12/14/2019).
- 2020 "How Enterprise Imaging is Leveraged for Patient Care from a Distance," Panelist, HIMSS-SIIM Enterprise Imaging Community Roundtable, Webinar (4/15/2020).
- 2020 "Brief Introduction to AI with Definitions," Association for Pathology Informatics (API) Digital Pathology and AI Workshop 4.0, Virtual Meeting, New York, NY (10/22/2020).

Session / Conference Chair:

- 2018 Moderator, Informatics Platform Session, USCAP Annual Meeting 2018, Vancouver, BC (3/20/2018)
- 2018 Moderator / Co-chair, Pathology Informatics Boot Camp, Pathology Informatics Summit 2018, Pittsburgh, PA (5/21/2018)
- 2018 Moderator, Short Abstract Presentations, Pathology Informatics Summit 2018, Pittsburgh, PA (5/22/2018)
- 2019 Moderator / Co-chair, Pathology Informatics Boot Camp, Pathology Informatics Summit 2019, Pittsburgh, PA (5/6/2019)
- 2019 Moderator, Short Abstract Presentations, Pathology Informatics Summit 2018, Pittsburgh, PA (5/8/2019)
- 2019 Co-chair, Frontiers in Pathology Imaging Informatics Session, Society for Imaging Informatics in Medicine (SIIM) Annual Meeting 2019, Aurora, CO (5/28/2019)
- 2022 Chair / Moderator, Digital Pathology: Current State, Next Steps, Future Visions, Session 1021S, Society for Imaging Informatics in Medicine (SIIM) Annual Meeting 2022, Kissimmee, FL, 6/9/2021.
- 2022 Moderator, Association for Pathology Informatics (API) Digital Pathology and AI Workshop 6.0, Virtual Meeting, Philadelphia, PA (11/3/2022).

III. GRANT SUPPORT

Current Support:

None.

Pending Support:

None.

Previous support:

<u>Grant Source:</u>	NCI (1R21CA237493-01)
<u>Title:</u>	Development and Dissemination of KiNet: A Novel Imaging Informatics Tool for Gastrointestinal and Pancreatic Neuroendocrine Tumors
<u>Role on Project:</u>	Co-Principal investigator (Xing, co-PI)
<u>Effort:</u>	0.6 calendar months
<u>Inclusive Dates:</u>	4/2/2019 to 3/31/2022
<u>Total Direct Costs:</u>	\$108,750
<u>Grant Source:</u>	NCI
<u>Title:</u>	Cancer Center Support Grant
<u>Role on Project:</u>	Co-investigator (Nelson, PI)
<u>Effort:</u>	0.6 calendar months
<u>Inclusive Dates:</u>	5/1/2012 to 4/30/2017
<u>Total Direct Costs:</u>	\$4,100,428
<u>Grant Source:</u>	Commonwealth Grand Fund
<u>Title:</u>	Tumor Microenvironment
<u>Role on Project:</u>	Co-investigator (Pardoll, PI)
<u>Effort:</u>	2.4 calendar months
<u>Inclusive Dates:</u>	2014 to 2015
<u>Grant Source:</u>	AACR / Phillip A. Sharp Award
<u>Title:</u>	The Intersection of Epigenetic and Immune Checkpoint Therapy
<u>Role on Project:</u>	Co-investigator (Baylin, PI)
<u>Effort:</u>	0.24 calendar months
<u>Inclusive Dates:</u>	7/1/2014 to 6/30/2015
<u>Total Direct Costs:</u>	\$227,275
<u>Grant Source:</u>	NCI
<u>Title:</u>	SPORE in Prostate Cancer
<u>Role on Project:</u>	Co-investigator (Nelson, PI)
<u>Effort:</u>	0.6 calendar months
<u>Inclusive Dates:</u>	9/1/2014 to 8/31/2019
<u>Total Direct Costs:</u>	\$1,564,392
<u>Grant Source:</u>	DOD
<u>Title:</u>	SPORE in Prostate Cancer
<u>Role on Project:</u>	Co-investigator (Sfanos, PI)
<u>Effort:</u>	0.6 calendar months
<u>Inclusive Dates:</u>	9/30/2014 to 9/29/2017
<u>Total Direct Costs:</u>	\$230,833
<u>Grant Source:</u>	Prostate Cancer Foundation
<u>Title:</u>	Evaluation of PSMA based PET as functional imaging biomarkers
<u>Role on Project:</u>	Collaborator (Cho, PI)
<u>Effort:</u>	0.36 calendar months
<u>Inclusive Dates:</u>	2011 to 2013
<u>Total Direct Costs:</u>	\$300,000
<u>Grant Source:</u>	Amy and Jane Goldman (gift)
<u>Title:</u>	Quantitative Study of PanIN volume: implications for the early

<u>Role on Project:</u>	detection of pancreatic cancer Principal Investigator
<u>Effort:</u>	1.2 calendar months
<u>Inclusive Dates:</u>	12/2009 to 12/2010
<u>Total Direct Costs:</u>	\$75,000
<u>Grant Source:</u>	Sol Goldman Pancreatic Cancer Research Center
<u>Title:</u>	Quantitative Study of PanIN volume: implications for the early detection of pancreatic cancer
<u>Role on Project:</u>	Principal Investigator
<u>Effort:</u>	1.2 calendar months
<u>Inclusive Dates:</u>	12/2009 to 12/2010
<u>Total Direct Costs:</u>	\$50,000
<u>Grant Source:</u>	NIH (5 T32 CA067751-12)
<u>Title:</u>	Ruth L. Kirschenstein National Research
<u>Role on Project:</u>	Trainee
<u>Effort:</u>	9.0 calendar months
<u>Inclusive Dates:</u>	7/2009 to 6/2010
<u>Total Direct Costs:</u>	\$46,992

XIV. BIBLIOGRAPHY

Google Scholar (actively maintained):

<https://scholar.google.com/citations?user=9uuZu6YAAAAJ&hl=en>

NCBI My Bibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/toby.cornish.1/bibliography/public/>

Peer-Reviewed Scientific Papers:

1. Braun KM, **Cornish T**, Valm A, Cundiff J, Pauly JL, and Fan S. Immunotoxicology of cigarette smoke condensates: Effects on interferon g-inducible macrophage functional capacities. *Toxicol Appl Pharmacol*. 1998; 149:136-143. doi: [10.1006/taap.1997.8346](https://doi.org/10.1006/taap.1997.8346). PMID: [9571981](https://pubmed.ncbi.nlm.nih.gov/9571981/).
2. **Cornish T**, Chi J, Johnson S, Lu Y, and Campanelli JT. Globular domains of agrin are functional units which collaborate to induce acetylcholine receptor clustering. *J Cell Sci*. 1999; 112:1213-1223. PMID: [10085256](https://pubmed.ncbi.nlm.nih.gov/10085256/).
3. **Cornish T**, Branch DW, Wheeler BC, and Campanelli JT. Microcontact printing: a versatile technique for the study of synaptogenic molecules. *Mol Cell Neurosci*. 2002; 20:140-153. doi: [10.1006/mcne.2002.1101](https://doi.org/10.1006/mcne.2002.1101). PMID: [12056845](https://pubmed.ncbi.nlm.nih.gov/12056845/).
4. Gurel B, Iwata T, Koh CM, Jenkins RB, Lan F, Van Dang C, Hicks JL, Morgan J, **Cornish TC**, Sutcliffe S, Isaacs WB, Luo J, and De Marzo AM. Nuclear MYC protein overexpression is an early alteration in human prostate carcinogenesis. *Mod Pathol*. 2008; 21(9):1156-67.

- doi: [10.1038/modpathol.2008.111](https://doi.org/10.1038/modpathol.2008.111). PMID: [18567993](https://pubmed.ncbi.nlm.nih.gov/18567993/); PMCID: [PMC3170853](https://pubmed.ncbi.nlm.nih.gov/PMC3170853/); NIHMS285485
5. Yegnasubramanian S, Haffner MC, Zhang Y, Gurel B, **Cornish TC**, Wu Z, Irizarry RA, Morgan J, Hicks J, DeWeese TL, Isaacs WB, Bova GS, De Marzo AM, and Nelson WG. DNA hypomethylation arises later in prostate cancer progression than CpG island hypermethylation and contributes to metastatic tumor heterogeneity. *Cancer Res.* 2008; 68(21):8954-67. doi: [10.1158/0008-5472.CAN-07-6088](https://doi.org/10.1158/0008-5472.CAN-07-6088). PMID: [18974140](https://pubmed.ncbi.nlm.nih.gov/18974140/); PMCID: [PMC2577392](https://pubmed.ncbi.nlm.nih.gov/PMC2577392/).
 6. Halushka MK, Selvin E, Lu J, Macgregor AM, **Cornish TC**. Use of Human Vascular Tissue Microarrays for Measurement of Advanced Glycation End Products. *J Histochem Cytochem.* 2009; 57(6):559-66. doi: [10.1369/jhc.2009.953273](https://doi.org/10.1369/jhc.2009.953273). PMID: [19223295](https://pubmed.ncbi.nlm.nih.gov/19223295/); PMCID: [PMC2690436](https://pubmed.ncbi.nlm.nih.gov/PMC2690436/).
 7. **Cornish TC**, Bagnasco SM, Macgregor AM, Lu J, Selvin E, and Halushka MK. Glomerular protein levels of matrix metalloproteinase-1 and tissue inhibitor of metalloproteinase-1 are lower in diabetic subjects. *J Histochem Cytochem.* 2009; 57(11):995-1001. doi: [10.1369/jhc.2009.954107](https://doi.org/10.1369/jhc.2009.954107). PMID: [19506087](https://pubmed.ncbi.nlm.nih.gov/19506087/); PMCID: [PMC2762888](https://pubmed.ncbi.nlm.nih.gov/PMC2762888/).
 8. **Cornish TC** and Halushka MK. Color Deconvolution for the Analysis of Tissue Microarrays. *Anal Quant Cytol and Histol.* 2009; 31:304-312. PMID: [20701098](https://pubmed.ncbi.nlm.nih.gov/20701098/).
 9. Halushka MK, **Cornish TC**, Lu J, Selvin S, and Selvin E. Creation, Validation, and Quantitative Analysis of Protein Expression in Vascular Tissue Microarrays. *Cardiovasc Pathol.* 2010; 19(3):136-46. doi: [10.1016/j.carpath.2008.12.007](https://doi.org/10.1016/j.carpath.2008.12.007). Epub 2009 Feb 11. PMID: [19211265](https://pubmed.ncbi.nlm.nih.gov/19211265/); PMCID: [PMC2866781](https://pubmed.ncbi.nlm.nih.gov/PMC2866781/).
 10. Hillel AT, Taube JM, **Cornish TC**, Sharma B, Halushka M, McCarthy EF, Hutchins GM, and Elisseff JH. Characterization of human mesenchymal stem cell engineered cartilage: analysis of its ultrastructure, cell density, and chondrocyte phenotype as compared to native adult and fetal cartilage. *Cells Tissues Organs.* 2010; 191(1):12-20. doi: [10.1159/000225985](https://doi.org/10.1159/000225985). Epub 2009 Jun 18. PMID: [19546516](https://pubmed.ncbi.nlm.nih.gov/19546516/).
 11. Selvin E, Najjar SS, **Cornish TC**, and Halushka MK. A comprehensive histopathological evaluation of vascular medial fibrosis: Insights into the pathophysiology of arterial stiffening. *Atherosclerosis.* 2010; 208(1):69-74. doi: [10.1016/j.atherosclerosis.2009.06.025](https://doi.org/10.1016/j.atherosclerosis.2009.06.025). Epub 2009 Jun 26. PMID: [19632677](https://pubmed.ncbi.nlm.nih.gov/19632677/); PMCID: [PMC2813392](https://pubmed.ncbi.nlm.nih.gov/PMC2813392/).
 12. Shi C, Scudiere JR, **Cornish TC**, Lam-Himlin D, Park JY, Fox M, and Montgomery EA. Clear Cell Change in Colonic Tubular Adenoma and Corresponding Colonic Clear Cell Adenocarcinoma is Associated with an Altered Mucin Core Protein Profile. *Am J Surg Path.* 2010 Sep;34(9):1344-50. doi: [10.1097/PAS.0b013e3181ec0810](https://doi.org/10.1097/PAS.0b013e3181ec0810). PMID: [20697252](https://pubmed.ncbi.nlm.nih.gov/20697252/).
 13. Lam-Himlin D, Park JY, **Cornish TC**, Shi C and Montgomery EA. Morphologic Characterization of Gastric Polyps in Juvenile Polyposis and Peutz-Jeghers' Syndromes versus Gastric Hyperplastic Polyps. *Am J Surg Path.* 2010; 34(11):1656-62. doi: [10.1097/PAS.0b013e3181f2b1f1](https://doi.org/10.1097/PAS.0b013e3181f2b1f1). PMID: [20924281](https://pubmed.ncbi.nlm.nih.gov/20924281/).
 14. Park JY, **Cornish TC**, Lam-Himlin D, Shi C, and Montgomery EA. Gastric Lesions in Patients with Autoimmune Metaplastic Atrophic Gastritis (AMAG) in a Tertiary Care Setting.

- Am J Surg Pathol.* 2010; 34(11):1591-8. doi: [10.1097/PAS.0b013e3181f623af](https://doi.org/10.1097/PAS.0b013e3181f623af). PMID: [20975338](https://pubmed.ncbi.nlm.nih.gov/20975338/).
15. Johnson KE, Redd AD, Quinn TC, Collinson-Streng AN, **Cornish TC**, Kong X, Rajni S, Tobian AR, Tsai B, Sherman ME, Kigozi G, Serwadda D, Wawer MJ, and Gray RH. Effects of HIV-1 and herpes simplex virus type 2 infection on lymphocyte and dendritic cell density in adult foreskins from Rakai, Uganda. *J Infect Dis*, 2011; 203(5):602-9. doi: [10.1093/infdis/jiq091](https://doi.org/10.1093/infdis/jiq091). Epub 2011 Jan 10. PMID: [21220779](https://pubmed.ncbi.nlm.nih.gov/21220779/); PMCID: [PMC3071278](https://pubmed.ncbi.nlm.nih.gov/PMC3071278/).
 16. Bisht S, Khan M, Bekhit M, Bai H, **Cornish TC**, Mizuma M, Rudek M, Zhao M, Ray B, Lahiri D, Maitra A, and Anders RA. A polymeric nanoparticle formulation of curcumin (NanoCurc™) ameliorates CCl₄ induced hepatic injury and fibrosis. *Lab Invest.* 2011 Sep;91(9):1383-95. doi: [10.1038/labinvest.2011.86](https://doi.org/10.1038/labinvest.2011.86). Epub 2011 Jun 20. PMID: [21691262](https://pubmed.ncbi.nlm.nih.gov/21691262/); PMCID: [PMC3345948](https://pubmed.ncbi.nlm.nih.gov/PMC3345948/).
 17. Meriden Z, Shi C, Edil BH, Ellison T, Wolfgang CL, **Cornish TC**, Schulick RD, Hruban RH. Hyaline globules in neuroendocrine and solid-pseudopapillary neoplasms of the pancreas: a clue to the diagnosis. *Am J Surg Pathol.* 2011 Jul;35(7):981-8. doi: [10.1097/PAS.0b013e31821a9a14](https://doi.org/10.1097/PAS.0b013e31821a9a14). PMID: [21677537](https://pubmed.ncbi.nlm.nih.gov/21677537/); PMCID: [PMC3283163](https://pubmed.ncbi.nlm.nih.gov/PMC3283163/); NIHMS289549
 18. Bai H, Zhang N, Xu Y, Chen Q, Khan M, Potter JJ, Nayar SK, **Cornish T**, Alpini G, Bronk S, Pan D, Anders RA. Yes-associated protein regulates the hepatic response after bile duct ligation. *Hepatology.* 2012 Sep;56(3):1097-107. doi: [10.1002/hep.25769](https://doi.org/10.1002/hep.25769). Epub 2012 Aug 8. PMID: [22886419](https://pubmed.ncbi.nlm.nih.gov/22886419/); PMCID: [PMC3431197](https://pubmed.ncbi.nlm.nih.gov/PMC3431197/).
 19. Kim B, Barker NJ, Hruban RH, Sandone C, and **Cornish TC**. The Johns Hopkins Atlas of Pancreatic Pathology: Developing an Interactive Atlas and Teaching Algorithm for the Apple iPad. *J Biocommun*, 2012; 38(1):4-10.
 20. Tobian AR, Grabowski MK, Kigozi G, Redd AD, Eaton KP, Serwadda D, **Cornish TC**, Nalugoda F, Watya C, Buwembo D, Nkale J, Wawer MJ, Quinn TC, Gray RH. Human Papillomavirus Clearance Among Males Is Associated with HIV Acquisition and Increased Foreskin Dendritic Cell Density in Rakai, Uganda. *J Infect Dis.* 2013 Jun;207(11):1713-22. doi: [10.1093/infdis/jit035](https://doi.org/10.1093/infdis/jit035). Epub 2013 Jan 23. PMID: [23345339](https://pubmed.ncbi.nlm.nih.gov/23345339/); PMCID: [PMC3636782](https://pubmed.ncbi.nlm.nih.gov/PMC3636782/).
 21. Samols MA, Smith NE, Gerber JM, Vuica-Ross M, Gocke CD, Burns KH, Borowitz MJ, **Cornish TC**, Duffield AS (shared last authors). Software Automated Counting of Ki-67 Proliferation Index Correlates with Pathologic Grade and Disease Progression of Follicular Lymphomas. *Am J Clin Pathol.* 2013 Oct;140(4):579-87. doi: [10.1309/ajcptma1f6lwyqtq](https://doi.org/10.1309/ajcptma1f6lwyqtq). PMID: [24045557](https://pubmed.ncbi.nlm.nih.gov/24045557/); PMCID: [PMC4010253](https://pubmed.ncbi.nlm.nih.gov/PMC4010253/).
 22. Rodic N, Zampella JG, **Cornish TC**, Wheelan SJ, Burns KH. Translocation junctions in TCF3-PBX1 acute lymphoblastic leukemia/lymphoma cluster near transposable elements. *Mob DNA.* 2013 Oct 17;4(1):22. doi: [10.1186/1759-8753-4-22](https://doi.org/10.1186/1759-8753-4-22). PMID: [24135088](https://pubmed.ncbi.nlm.nih.gov/24135088/); PMCID: [PMC4015642](https://pubmed.ncbi.nlm.nih.gov/PMC4015642/).
 23. McCall CM, Shi C, **Cornish TC**, Klimstra DS, Tang LH, Basturk O, Mun LJ, Ellison TA, Wolfgang CL, Choti MA, Schulick RD, Edil BH, Hruban RH. Grading of Well-differentiated

- Pancreatic Neuroendocrine Tumors Is Improved by the Inclusion of Both Ki67 Proliferative Index and Mitotic Rate. *Am J Surg Pathol*. 2013 Nov;37(11):1671-7. doi: [10.1097/pas.0000000000000089](https://doi.org/10.1097/pas.0000000000000089). PMID: [24121170](https://pubmed.ncbi.nlm.nih.gov/24121170/); PMCID: [PMC3891823](https://pubmed.ncbi.nlm.nih.gov/PMC3891823/).
24. Pavlovich CP, **Cornish TC**, Mullins JK, Fradin J, Mettee LZ, Connor JT, Reese AC, Askin FB, Luck R, Epstein JI, Burke HB. High-resolution transrectal ultrasound: Pilot study of a novel technique for imaging clinically localized prostate cancer? *Urol Oncol*. 2014 Jan;32(1):34.e27-32. doi: [10.1016/j.urolonc.2013.01.006](https://doi.org/10.1016/j.urolonc.2013.01.006). Epub 2013 Apr 2. PMID: [23558161](https://pubmed.ncbi.nlm.nih.gov/23558161/).
 25. Ellison TA, Wolfgang CL, Shi C, Cameron JL, Murakami P, Mun LJ, Singhi AD, **Cornish TC**, Olinio K, Meriden Z, Choti M, Diaz LA, Pawlik TM, Schulick RD, Hruban RH, Edil BH. A Single Institution's 26-Year Experience with Nonfunctional Pancreatic Neuroendocrine Tumors: A Validation of Current Staging Systems and a New Prognostic Nomogram. *Ann Surg*. 2014 Feb;259(2):204-12. doi: [10.1097/sla.0b013e31828f3174](https://doi.org/10.1097/sla.0b013e31828f3174). PMID: [23673766](https://pubmed.ncbi.nlm.nih.gov/23673766/); PMCID: [PMC4048026](https://pubmed.ncbi.nlm.nih.gov/PMC4048026/).
 26. Haider BA, Baras AS, McCall MN, Hertel JA, **Cornish TC**, Halushka MK. A critical evaluation of microRNA biomarkers in non-neoplastic disease. *PLoS One*. 2014 Feb 26;9(2):e89565. doi: [10.1371/journal.pone.0089565](https://doi.org/10.1371/journal.pone.0089565). PMID: [24586876](https://pubmed.ncbi.nlm.nih.gov/24586876/); PMCID: [PMC3935874](https://pubmed.ncbi.nlm.nih.gov/PMC3935874/).
 27. Olson MT, Novak A, Boonyaarunnate T, Trotter J, Sachs S, Kelly D, Ford S, **Cornish TC**, Toll A, Tatsas AD, Maleki Z, Erozan YS, Rosenthal DL. Reproducibility of the Johns Hopkins Hospital template for urologic cytology samples. *J. Amer. Soc. Cytopathol*. 2014 May;3(3):156-164. doi: [10.1016/j.jasc.2014.02.003](https://doi.org/10.1016/j.jasc.2014.02.003). Epub 2014 Feb 28. PMID: [31051740](https://pubmed.ncbi.nlm.nih.gov/31051740/).
 28. Kent OA, McCall MN, **Cornish TC**, Halushka MK. Lessons from miR-143/145: the importance of cell-type localization of miRNAs. *Nucleic Acids Res*. 2014;42(12):7528-38. doi: [10.1093/nar/gku461](https://doi.org/10.1093/nar/gku461). Epub 2014 May 29. PMID: [24875473](https://pubmed.ncbi.nlm.nih.gov/24875473/); PMCID: [PMC4081080](https://pubmed.ncbi.nlm.nih.gov/PMC4081080/).
 29. Chapiro J, Wood LD, Lin M, Duran R, **Cornish T**, Lesage D, Charu V, Schernthaner R, Wang Z, Tacher V, Savic LJ, Kamel IR, Geschwind JF. Radiologic-Pathologic Analysis of Contrast-enhanced and Diffusion-weighted MR Imaging in Patients with HCC after TACE: Diagnostic Accuracy of 3D Quantitative Image Analysis. *Radiology*. 2014 Dec;273(3):746-58. doi: [10.1148/radiol.14140033](https://doi.org/10.1148/radiol.14140033). Epub 2014 Jul 15. PMID: [25028783](https://pubmed.ncbi.nlm.nih.gov/25028783/); PMCID: [PMC4263418](https://pubmed.ncbi.nlm.nih.gov/PMC4263418/).
 30. Shi C, Gonzalez RS, Zhao Z, Koyama T, **Cornish TC**, Hande KR, Walker R, Sandler M, Berlin J, Liu EH. Liver metastases of small intestine neuroendocrine tumors: ki-67 heterogeneity and world health organization grade discordance with primary tumors. *Amer. J. Clin. Pathol*. 2015 Mar;143(3):398-404. doi: [10.1309/ajcpq55skocyzfzhn](https://doi.org/10.1309/ajcpq55skocyzfzhn). PMID: [25696798](https://pubmed.ncbi.nlm.nih.gov/25696798/); PMCID: [PMC4354931](https://pubmed.ncbi.nlm.nih.gov/PMC4354931/).
 31. Le DT, Uram JN, Wang H, Bartlett BR, Kemberling H, Eyring AD, Skora AD, Luber BS, Azad NS, Laheru D, Biedrzycki B, Donehower RC, Zaheer A, Fisher GA, Crocenzi TS, Lee JJ, Duffy SM, Goldberg RM, de A, Koshiji M, Bhajee F, Huebner T, Hruban RH, Wood LD, Cuka N, Pardoll DM, Papadopoulos N, Kinzler KW, Zhou S, **Cornish TC**, Taube JM, Anders RA, Eshleman JR, Vogelstein B, Diaz LA. PD-1 Blockade in Tumors with Mismatch-

- Repair Deficiency. *N Engl J Med*. 2015 Jun; 372(26):2509-2520. doi: [10.1056/nejmoa1500596](https://doi.org/10.1056/nejmoa1500596). Epub 2015 May 30. PMID: [26028255](https://pubmed.ncbi.nlm.nih.gov/26028255/); PMCID: [PMC4481136](https://pubmed.ncbi.nlm.nih.gov/PMC4481136/).
32. **Cornish TC**, Chakravarti A, Kapoor A, Halushka MK. HPASubC: a suite of tools for user subclassification of Human Protein Atlas tissue images. *J. Pathol. Inform.* 2015 Jun; 36(6). doi: [10.4103/2153-3539.159213](https://doi.org/10.4103/2153-3539.159213). PMID: [26167380](https://pubmed.ncbi.nlm.nih.gov/26167380/); PMCID: [PMC4485190](https://pubmed.ncbi.nlm.nih.gov/PMC4485190/).
 33. Rowe SP, Gage KL, Faraj SF, Macura K, **Cornish TC**, Gonzalez-Roibon N, Gunes G, Munari E, Partin AW, Pavlovich CP, Han M, Carter HB, Bivalacqua TJ, Blackford A, Holt D, Dannels RF, Netto GJ, Lodge M, Mease RC, Pomper MG, Cho SY. ¹⁸F-DCFBC PET/CT for PSMA-based Detection and Characterization of Primary Prostate Cancer. *J Nucl Med*. 2015 Jul; 56(7):1003-10. doi: [10.2967/jnumed.115.154336](https://doi.org/10.2967/jnumed.115.154336). Epub 2015 Jun 11. PMID: [26069305](https://pubmed.ncbi.nlm.nih.gov/26069305/); PMCID: [PMC4659400](https://pubmed.ncbi.nlm.nih.gov/PMC4659400/).
 34. Baras AS, Myers JR, Gupta S, Weng P, Ashton JM, **Cornish TC**, Halushka MK. miRge - A Multiplexed Method of Processing Small RNA-seq Data to Determine microRNA Entropy. *PLoS One*. 2015 Nov 16;10(11):e0143066. doi: [10.1371/journal.pone.0143066](https://doi.org/10.1371/journal.pone.0143066). PMID: [26571139](https://pubmed.ncbi.nlm.nih.gov/26571139/); PMCID: [PMC4646525](https://pubmed.ncbi.nlm.nih.gov/PMC4646525/).
 35. Cimino-Mathews A, Thompson E, Taube JM, Ye X, Lu Y, Meeker A, Xu H, Sharma R, Lecksell K, **Cornish TC**, Cuka N, Argani P, Emens LA. PD-L1 (B7-H1) Expression and the Immune Tumor Microenvironment in Primary and Metastatic Breast Carcinomas. *Hum Pathol*. 2016 Jan;47(1):52-63. doi: [10.1016/j.humpath.2015.09.003](https://doi.org/10.1016/j.humpath.2015.09.003). Epub 2015 Sep 21. PMID: [26527522](https://pubmed.ncbi.nlm.nih.gov/26527522/); PMCID: [PMC4778421](https://pubmed.ncbi.nlm.nih.gov/PMC4778421/).
 36. Anene DF, Rosenberg AZ, Kleiner DE, **Cornish TC**, Halushka MK. Utilization of HPASubC for the Identification of Sinusoid-Specific Proteins in the Liver. *J Proteome Res*. 2016 May 6;15(5):1623-9. doi: [10.1021/acs.jproteome.6b00073](https://doi.org/10.1021/acs.jproteome.6b00073). Epub 2016 Mar 29. PMID: [27005832](https://pubmed.ncbi.nlm.nih.gov/27005832/).
 37. Criscione SW, Theodosakis N, Micevic G, **Cornish TC**, Burns KH, Neretti N, Rodić N. Genome-wide characterization of human L1 antisense promoter-driven transcripts. *BMC Genomics*. 2016 Jun 14;17(1):463. doi: [10.1186/s12864-016-2800-5](https://doi.org/10.1186/s12864-016-2800-5). PMID: [27301971](https://pubmed.ncbi.nlm.nih.gov/27301971/); PMCID: [PMC4908685](https://pubmed.ncbi.nlm.nih.gov/PMC4908685/).
 38. Aiello NM, Bajor DL, Norgard RJ, Sahnoud A, Bhagwat N, Pham MN, **Cornish TC**, Iacobuzio-Donahue CA, Vonderheide RH, Stanger BZ. Metastatic progression is associated with dynamic changes in the local microenvironment. *Nat Commun*. 2016 Sep 15;7:12819. doi: [10.1038/ncomms12819](https://doi.org/10.1038/ncomms12819). PMID: [27628423](https://pubmed.ncbi.nlm.nih.gov/27628423/); PMCID: [PMC5027614](https://pubmed.ncbi.nlm.nih.gov/PMC5027614/).
 39. Zampella JG, Rodić N, Yang WR, Huang CR, Welch J, Gnanakkan VP, **Cornish TC**, Boeke JD, Burns KH. A map of mobile DNA insertions in the NCI-60 human cancer cell panel. *Mob DNA*. 2016 Oct 31;7:20. doi: [10.1186/s13100-016-0078-4](https://doi.org/10.1186/s13100-016-0078-4). PMID: [27807467](https://pubmed.ncbi.nlm.nih.gov/27807467/); PMCID: [PMC5087121](https://pubmed.ncbi.nlm.nih.gov/PMC5087121/).
 40. Hempel HA, Cuka NS, Kulac I, Barber JR, **Cornish TC**, Platz EA, De Marzo AM, Sfanos KS. Low Intratumoral Mast Cells Are Associated with a Higher Risk of Prostate Cancer Recurrence. *Prostate*. 2017 Mar;77(4):412-424. doi: [10.1002/pros.23280](https://doi.org/10.1002/pros.23280). Epub 2016 Nov 21. PMID: [27868214](https://pubmed.ncbi.nlm.nih.gov/27868214/).
 41. Duran R, Mirpour S, Pekurovsky V, Ganapathy-Kanniappan S, Brayton CF, **Cornish TC**, Gorodetski B, Reyes J, Chapiro J, Scherthaner RE, Frangakis C, Lin M, Sun JD, Hart CP,

- Geschwind JF. Preclinical Benefit of Hypoxia-Activated Intraarterial Therapy with Evofosfamide in Liver Cancer. *Clin Cancer Res.* 2017 Jan 15;23(2):536-548. doi: [10.1158/1078-0432.ccr-16-0725](https://doi.org/10.1158/1078-0432.ccr-16-0725). Epub 2016 Jul 20. PMID: [27440271](https://pubmed.ncbi.nlm.nih.gov/27440271/); PMCID: [PMC5241187](https://pubmed.ncbi.nlm.nih.gov/PMC5241187/).
42. Thompson ED, Zahurak M, Murphy A, **Cornish T**, Cuka N, Abdelfatah E, Yang S, Duncan M, Ahuja N, Taube JM, Anders RA, Kelly RJ. Patterns of PD-L1 expression and CD8 T cell infiltration in gastric adenocarcinomas and associated immune stroma. *Gut.* 2017 May;66(5):794-801. doi: [10.1136/gutjnl-2015-310839](https://doi.org/10.1136/gutjnl-2015-310839). Epub 2016 Jan 22. PMID: [26801886](https://pubmed.ncbi.nlm.nih.gov/26801886/); PMCID: [PMC4958028](https://pubmed.ncbi.nlm.nih.gov/PMC4958028/).
 43. Yanik EL, Kaunitz GJ, Cottrell TR, Succaria F, McMiller TL, Ascierto ML, Esandrio J, Xu H, Ogurtsova A, **Cornish T**, Lipson EJ, Topalian SL, Engels EA, and Taube JM. Association of HIV Status with Local Immune Response to Anal Squamous Cell Carcinoma: Implications for Immunotherapy. *JAMA Oncol.* 2017 Jul 1;3(7):974-978. doi: [10.1001/jamaoncol.2017.0115](https://doi.org/10.1001/jamaoncol.2017.0115). PMID: [28334399](https://pubmed.ncbi.nlm.nih.gov/28334399/); PMCID: [PMC5696632](https://pubmed.ncbi.nlm.nih.gov/PMC5696632/).
 44. Sunshine JC, Nguyen P, Kaunitz G, Cottrell T, Berry S, Esandrio J, Xu H, Ogurtsova A, Bleich KR, **Cornish TC**, Lipson EJ, Anders RA, Taube J. PD-L1 Expression in Melanoma: A Quantitative Immunohistochemical Antibody Comparison. *Clin Cancer Res.* 2017 Aug 15;23(16):4938-4944. doi: [10.1158/1078-0432.ccr-16-1821](https://doi.org/10.1158/1078-0432.ccr-16-1821). Epub 2017 Apr 20. PMID: [28428193](https://pubmed.ncbi.nlm.nih.gov/28428193/); PMCID: [PMC6175606](https://pubmed.ncbi.nlm.nih.gov/PMC6175606/).
 45. Baena Del Valle JA, Zheng Q, Hicks J, Fedor H, Trock BJ, Morrissey C, Corey E, **Cornish TC**, Sfanos KS, and De Marzo AM. Rapid Loss of RNA Detection by *In Situ* Hybridization in Stored Tissue Blocks and Preservation by Cold Storage of Unstained Slides. *Am J Clin Pathol.* 2017 Nov 2;148(2):398-415. doi: [10.1093/ajcp/aqx094](https://doi.org/10.1093/ajcp/aqx094). PMID: [29106457](https://pubmed.ncbi.nlm.nih.gov/29106457/); PMCID: [PMC5848261](https://pubmed.ncbi.nlm.nih.gov/PMC5848261/).
 46. Robertson SA, Cimino-Mathews A, **Cornish TC**. HER2 Status in Gastroesophageal Adenocarcinomas: Correlation Between Immunohistochemistry and Fluorescence In Situ Hybridization Methodologies. *Appl Immunohistochem Mol Morphol.* 2018 Jan;26(1):35-39. doi: [10.1097/pai.0000000000000382](https://doi.org/10.1097/pai.0000000000000382). PMID: [27153447](https://pubmed.ncbi.nlm.nih.gov/27153447/).
 47. Xing F, **Cornish TC**, Bennett T, Ghosh D, and Yang L. Pixel-to-pixel Learning with Weak Supervision for Single-stage Nucleus Recognition in Ki67 Images. *IEEE Transactions on Biomedical Engineering.* 2019 Nov;66(11):3088-3097. doi: [10.1109/tbme.2019.2900378](https://doi.org/10.1109/tbme.2019.2900378). Epub 2019 Feb 22. PMID: [30802845](https://pubmed.ncbi.nlm.nih.gov/30802845/).
 48. Westbrook L, Henn P, and **Cornish TC**. Lifting Agent Granuloma: Histologic Findings Following Use of ORISE™ Gel for Endoscopic Resections in the Gastrointestinal Tract. *Am J Clin Pathol.* 2019. Apr 15;153(5):630-638. doi: [10.1093/ajcp/aqz204](https://doi.org/10.1093/ajcp/aqz204). PMID: [31875886](https://pubmed.ncbi.nlm.nih.gov/31875886/).
 49. Xuhong Z, **Cornish TC**, Yang L, Bennett TD, Ghosh D, and Xing F. Generative Adversarial Domain Adaptation for Nucleus Quantification in Images of Tissue Immunohistochemically-Stained for Ki67. *JCO Clin Cancer Inform.* 2020 Jul;4:666-679. doi: [10.1200/cci.19.00108](https://doi.org/10.1200/cci.19.00108). PMID: [32730116](https://pubmed.ncbi.nlm.nih.gov/32730116/); PMCID: [PMC7397778](https://pubmed.ncbi.nlm.nih.gov/PMC7397778/).
 50. Kricka LJ, **Cornish TC**, and Park JY. Eponyms in Clinical Chemistry. *Clinica Chimica Acta.* 2021 Jan;512:28-32. doi: [10.1016/j.cca.2020.11.014](https://doi.org/10.1016/j.cca.2020.11.014). PMID: [33242467](https://pubmed.ncbi.nlm.nih.gov/33242467/).

51. Xing F, **Cornish TC**, Bennett TD, and Ghosh D. Bidirectional Mapping-Based Domain Adaptation for Nucleus Detection in Cross-Modality Microscopy Images. *IEEE Trans Med Imaging*. 2021 Oct;40(10):2880-2896. doi: [10.1109/TMI.2020.3042789](https://doi.org/10.1109/TMI.2020.3042789). Epub 2021 Sep 30. PMID: [33284750](https://pubmed.ncbi.nlm.nih.gov/33284750/); PMCID: PMC8543886 (available on 2022-10-01).
52. **Cornish TC**, Kricka LJ, and Park JY. A Biopython-based method for comprehensively searching for eponyms in PubMed. *MethodsX*. 2021 Feb 14;8:101264. doi: [10.1016/j.mex.2021.101264](https://doi.org/10.1016/j.mex.2021.101264). PMID: [34434786](https://pubmed.ncbi.nlm.nih.gov/34434786/); PMCID: [PMC8374293](https://pubmed.ncbi.nlm.nih.gov/PMC8374293/).
53. He L, **Cornish TC**, Kricka LJ, Vandergriff TW, Yancey K, Nguyen K and Park JY. Trends in Dermatology Eponyms. *JAAD Int*. 2022 7:137-143. doi: [10.1016/j.jdin.2022.03.006](https://doi.org/10.1016/j.jdin.2022.03.006). PMID: [35497637](https://pubmed.ncbi.nlm.nih.gov/35497637/); PMCID: [PMC9043396](https://pubmed.ncbi.nlm.nih.gov/PMC9043396/).
54. Xing F and **Cornish TC**. Low-Resource Adversarial Domain Adaptation for Cross-Modality Nucleus Detection. In *Medical Image Computing and Computer Assisted Intervention – MICCAI 2022 Proceedings*. Wang L, Dou Q, Fletcher PT, Speidel S, Li S. (eds.) 2022. Lecture Notes in Computer Science, vol 13437. Springer, Cham. doi: [10.1007/978-3-031-16449-1_61](https://doi.org/10.1007/978-3-031-16449-1_61).
55. Kiemen A, Braxton AM, Grahn MP, Han KS, Babu JM, Reichel R, Amoa F, Hong SM, **Cornish TC**, Thompson ED, Wood LD, Hruban RH, Wirtz D, Jiang A, Bridgette K, Hsu J, Huang P, Wu PH. CODA: quantitative 3D reconstruction of large tissues at cellular resolution. *Nat Methods*. 2022 Oct 24. doi: [10.1038/s41592-022-01650-9](https://doi.org/10.1038/s41592-022-01650-9). Epub ahead of print. PMID: [36280719](https://pubmed.ncbi.nlm.nih.gov/36280719/).

Peer-Reviewed Review Articles:

1. Abel JT, Ouillette P, Williams CL, Blau J, Cheng J, Yao K, Lee WY, **Cornish TC**, Balis UGJ, McClintock DS. Display characteristics and their impact on digital pathology: a current review of pathologists' future "microscope." *J Pathol Inform* 2020 Aug 11;11(23) doi: [10.4103/jpi.jpi_38_20](https://doi.org/10.4103/jpi.jpi_38_20). PMID: [33042602](https://pubmed.ncbi.nlm.nih.gov/33042602/); PMCID: [PMC7518209](https://pubmed.ncbi.nlm.nih.gov/PMC7518209/).

Invited Review Articles:

1. **Cornish TC** and Hruban RH. Pancreatic Intraepithelial Neoplasia. *Surg Pathol Clin*. 2011 Jun;4(2):523-35. doi: [10.1016/j.path.2011.03.005](https://doi.org/10.1016/j.path.2011.03.005). Epub 2011 May 30. PMID: [26837486](https://pubmed.ncbi.nlm.nih.gov/26837486/).
2. **Cornish TC**, Swapp RE, Kaplan KJ. Whole-slide Imaging: Routine Pathologic Diagnosis. *Adv Anat Pathol*. 2012 May;19(3):152-159. doi: [10.1097/pap.0b013e318253459e](https://doi.org/10.1097/pap.0b013e318253459e). PMID: [22498580](https://pubmed.ncbi.nlm.nih.gov/22498580/).
3. **Cornish TC**, McClintock DS. Medicolegal and regulatory aspects of whole slide imaging-based telepathology. *Diagnostic Histopathol*. 2014 Dec;20(12):475-481.
4. **Cornish TC**. Clinical Application of Image Analysis in Pathology. *Adv Anat Pathol*. 2020 Jul;27(4):227-235. doi: [10.1097/pap.000000000000263](https://doi.org/10.1097/pap.000000000000263). PMID: [32467397](https://pubmed.ncbi.nlm.nih.gov/32467397/).

- Patel A, Williams CL, Hart SN, Garcia CA, Durant TJS, **Cornish TC**, McClintock DS. Cybersecurity and Information Assurance Essentials for the Clinical Laboratory. *J Appl Lab Med*. 2022. *In press*.

White Papers (Peer-Reviewed):

- Roth CJ, Clunie DA, Vining DJ, Berkowitz SJ, Berlin A, Bissonnette JP, Clark SD, **Cornish TC**, Eid M, Gaskin CM, Goel AK, Jacobs GC, Kwan D, Luviano DM, McBee MP, Miller K, Hafiz AM, Obcemea C, Parwani AV, Rotemberg V, Silver EL, Storm ES, Tcheng JE, Thullner KS, Folio LR. Multispecialty Enterprise Imaging Workgroup Consensus on Interactive Multimedia Reporting Current State and Road to the Future: HIMSS-SIIM Collaborative White Paper. *J Digit Imaging*. 2021 Jun;34(3):495-522. doi: [10.1007/s10278-021-00450-5](https://doi.org/10.1007/s10278-021-00450-5). Epub 2021 Jun 15. PMID: [34131793](https://pubmed.ncbi.nlm.nih.gov/34131793/); PMCID: [PMC8329131](https://pubmed.ncbi.nlm.nih.gov/PMC8329131/).
- Berkowitz SJ, Kwan D, **Cornish TC**, Silver EL, Thullner KS, Aisen A, Bui MM, Clark SD, Clunie DA, Eid M, Hartman DJ, Ho K, Leontiev A, Luviano DM, O'Toole PE, Parwani AV, Pereira NS, Rotemberg V, Vining DJ, Gaskin CM, Roth CJ, Folio LR. Interactive Multimedia Reporting Technical Considerations: HIMSS-SIIM Collaborative White Paper. *J Digit Imaging*. 2022 Aug 12. doi: [10.1007/s10278-022-00658-z](https://doi.org/10.1007/s10278-022-00658-z). Epub ahead of print. PMID: [35962150](https://pubmed.ncbi.nlm.nih.gov/35962150/).

Editorials / Viewpoints / Commentary / Opinion / Q&A:

- Park JY, **Cornish TC**, Hogarth M, Jackson BR, Rosati KB. Patient Privacy and Clinical Laboratory Data. *Clin Chem*. 2017 Aug;63(8):1321-1325. doi: [10.1373/clinchem.2016.266551](https://doi.org/10.1373/clinchem.2016.266551). Epub 2017 Jun 6. PMID: [28588122](https://pubmed.ncbi.nlm.nih.gov/28588122/).
- Evans AJ, Bauer TW, Bui MM, **Cornish TC**, Duncan H, Glassy EF, Hipp J, McGee RS, Murphy D, Myers C, O'Neill DG, Parwani AV, Rampy BA, Salama ME, Pantanowitz L. US Food and Drug Administration Approval of Whole Slide Imaging for Primary Diagnosis: A Key Milestone Is Reached and New Questions Are Raised. *Arch Pathol Lab Med*. 2018 Nov;142(11):1383-1387. doi: [10.5858/arpa.2017-0496-CP](https://doi.org/10.5858/arpa.2017-0496-CP). Epub 2018 Apr 30. PMID: [29708429](https://pubmed.ncbi.nlm.nih.gov/29708429/).
- Cornish TC**. Artificial intelligence for automating the measurement of histologic image biomarkers. *J Clin Invest*. 2021 Apr 15;131(8):147966. doi: [10.1172/JCI147966](https://doi.org/10.1172/JCI147966). PMID: [33855974](https://pubmed.ncbi.nlm.nih.gov/33855974/).
- Cornish TC**, McClintock DS. Are you prepared? Laboratory Downtime in the Ransomware Era. *Am J Clin Pathol*. 2022 Apr 1;157(4):482-484. doi: [10.1093/ajcp/aqac021](https://doi.org/10.1093/ajcp/aqac021). PMID: [35188947](https://pubmed.ncbi.nlm.nih.gov/35188947/).

Letters to Editor / Correspondence / Misc.:

- Park JY, **Cornish TC**, Lam-Himlin D, Shi C, Montgomery E. Gastric Lesions in Patients with Autoimmune Metaplastic Atrophic Gastritis Response. *Am J Surg Pathol*. 2011 Aug;35(8):1244-1245.

Case Reports:

1. Wu YE, Baras A, **Cornish T**, Riedel S, Burton EC. Fatal spontaneous *Clostridium septicum* gas gangrene: a possible association with iatrogenic gastric acid suppression. *Arch Pathol Lab Med*. 2014 Jun;138(6):837-41. doi: [10.5858/arpa.2013-0104-CR](https://doi.org/10.5858/arpa.2013-0104-CR). PMID: [24878026](https://pubmed.ncbi.nlm.nih.gov/24878026/).
2. Sue PK, Salazar-Austin NM, McDonald OG, Rishi A, **Cornish TC**, Arav-Boger R. Cytomegalovirus Enterocolitis in Immunocompetent Young Children: A Report of Two Cases and Review of the Literature. *Pediatr Infect Dis J*. 2016 May;35(5):573-6. doi: [10.1097/inf.0000000000001080](https://doi.org/10.1097/inf.0000000000001080). PMID: [26862673](https://pubmed.ncbi.nlm.nih.gov/26862673/); PMCID: [PMC4829454](https://pubmed.ncbi.nlm.nih.gov/PMC4829454/).
3. Palchaudhuri S, **Cornish T**, Inouye C, Nimgaonkar A. Tough to Swallow: Esophageal Food Impaction from Esophageal Amyloidosis. *Dig Dis Sci*. 2017 May;62(5):1165-1167. doi: [10.1007/s10620-016-4099-0](https://doi.org/10.1007/s10620-016-4099-0). PMID: [26961786](https://pubmed.ncbi.nlm.nih.gov/26961786/).
4. Kolb JM, Hiroyuki A, **Cornish TC**, Soetikno R, Hammad H. Severe submucosal fibrosis and granuloma complicating endoscopic submucosal dissection: unintended consequences of a lifting agent (with video). *Gastrointest Endosc*. 2021 Feb;93(2):524-526. doi: [10.1016/j.gie.2020.08.001](https://doi.org/10.1016/j.gie.2020.08.001). Epub 2020 Aug 5. PMID: [32763243](https://pubmed.ncbi.nlm.nih.gov/32763243/).
5. Hong ES, Messersmith WA, Hammad H, **Cornish TC**, Aisner DL. Tissue Displacement Versus Two Primary Colorectal Carcinomas? A Case Report on the Utility of Comparative Sequencing. *JCO Precis Oncol*. 2022 Oct;6:e2200252. doi: [10.1200/PO.22.00252](https://doi.org/10.1200/PO.22.00252). PMID: [36240469](https://pubmed.ncbi.nlm.nih.gov/36240469/).

Books:

1. **Cornish T**. *Agrin: soluble and substrate-attached studies of a synaptogenic protein*. Ph.D. dissertation, Neuroscience Program, University of Illinois at Urbana-Champaign. 2004.
2. Bauer T, Bloom K, Chen P, **Cornish T**, Dry S, Evans A, Frishberg D, Glassy E, Hassell L, Henricks W, Hipp J, Kaplan K, Pantanowitz L, Parwani A, Smith B, Walk E, eds. *CAP Pathology Resource Guide: Digital Pathology*. Version 4.0. Northfield, IL: College of American Pathologists. 2013.
3. Bauer T, Bloom K, Chen P, **Cornish T**, Dry S, Evans A, Frishberg D, Glassy E, Hassell L, Henricks W, Hipp J, Kaplan K, Pantanowitz L, Parwani A, Smith B, Walk E, eds. *CAP Pathology Resource Guide: Digital Pathology*. Version 5.0. Northfield, IL: College of American Pathologists. 2014.
4. Hipp J, Bauer TW, Bui MM, **Cornish TC**, Evans AJ, Glassy EF, Murphy D, Pantanowitz L, Parwani AV, Rampy BA, Salama ME, Waters R., eds. *CAP Pathology Resource Guide: Digital Pathology*. Version 6.0(1). Northfield, IL: College of American Pathologists. 2016.
5. Hipp J, Bauer TW, Bui MM, **Cornish TC**, Evans AJ, Glassy EF, McGee RS, Murphy D, O'Neill DG, Pantanowitz L, Parwani AV, Rampy BA, Salama ME, Waters R., Westfall K, eds. *CAP Pathology Resource Guide: Digital Pathology*. Version 7.0(1). Northfield, IL: College of American Pathologists. 2017.

Book Chapters:

1. **Cornish TC** and De Marzo AM. "Tissue Microarrays" in *Modern Molecular Biology: Approaches for Unbiased Discovery in Cancer Research*, Yegnasubramanian S and Isaacs WB (eds.) in series: Applied Bioinformatics and Biostatistics in Cancer Research. Kowalski J and Piantadosi S (series eds.) Springer. 2010. doi: [10.1007/978-0-387-69745-1_8](https://doi.org/10.1007/978-0-387-69745-1_8)
2. **Cornish TC** and Dilworth P. "Neoplasms of the Small Intestine" in *Gastrointestinal and Liver Pathology, Second Edition*. Iacobuzio-Donahue CA and Montgomery EA (eds.), Churchill Livingstone, Elsevier, Philadelphia. 2011.
3. Xing F, Zhang X, and **Cornish TC**. "Artificial Intelligence for Pathology" in *Artificial Intelligence in Medicine: Technical Basis and Clinical Applications*. Xing L, Giger ML, and Min JK (eds.), Academic Press, Elsevier. 2020. doi: [10.1016/B978-0-12-821259-2.00011-9](https://doi.org/10.1016/B978-0-12-821259-2.00011-9)
4. **Cornish TC** and McClintock DS. "Whole Slide Imaging and Telepathology" in *Whole Slide Imaging: Current Applications and Future Directions*. Parwani AV (ed.), Springer, Cham. 2022. doi: [10.1007/978-3-030-83332-9_7](https://doi.org/10.1007/978-3-030-83332-9_7)
5. McClintock DS, Abel JT, and **Cornish TC**. "Whole Slide Imaging Hardware, Software, and Infrastructure" in *Whole Slide Imaging: Current Applications and Future Directions*. Parwani AV (ed.), Springer, Cham. 2022. doi: [10.1007/978-3-030-83332-9_2](https://doi.org/10.1007/978-3-030-83332-9_2)

Other Media:

1. Hruban RH, Kim B, Sandone C, and **Cornish TC**. *The Johns Hopkins Atlas of Pancreatic Pathology*. iPad application, <http://itunes.apple.com/us/app/atlas-of-pancreas-pathology/id474845392?mt=8>. Vol. 1 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Oct. 27, 2011.
2. Tatsas AD, **Cornish TC**, Lennon AM, and Fishman EK. *The Johns Hopkins Atlas of Pancreatic Cytopathology*. iPad application, <http://itunes.apple.com/us/app/atlas-of-pancreas-pathology/id474845392?mt=8>. Vol. 2 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Nov. 28, 2012.
3. Fanaian N, Eun K, **Cornish TC**, and Hruban RH. *The Johns Hopkins iCareBook for Pancreatic Cancer*. iPad application, <https://itunes.apple.com/us/app/icarebook-hd/id697194060?mt=8>. Version 1.0 released Sept. 11, 2013.
4. **Cornish TC**, Barker N, Harrington J, Baldwin JM and Hruban RH. *The Johns Hopkins Pathology Flashcards App*. iPad application, <https://itunes.apple.com/us/app/johns-hopkins-flashcards/id1048379559?mt=8>. Version 1.0 released Nov. 17, 2015.
5. Rodriguez FJ and Eberhart CG. *The Johns Hopkins Atlas of Surgical Neuropathology*. iPad application, <https://itunes.apple.com/us/app/johns-hopkins-atlas-of-surgical-neuropathology/id1210848613?mt=8>. Vol. 3 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Mar. 1, 2017.
6. Khararjian AH, White MJ and Netto GJ. *The Johns Hopkins Atlas of Prostate Pathology*. iPad application, <https://itunes.apple.com/us/app/hopkins-prostate->

- [pathology/id1355871112?mt=8](#). Vol. 4 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Mar. 8, 2018.
7. Veras EFT, Ayhan A, Mao TL, White MJ and Barker NJ. *The Johns Hopkins Atlas of Ovarian Tumor Pathology*. iPad application, <https://itunes.apple.com/us/app/ovarian-tumor-pathology/id1450813424>. Vol. 5 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Jan. 29, 2019.
 8. VandenBussche CJ, Syed ZA, Zhou AG, Olson MT and Bishop JA. *The Johns Hopkins Atlas of Thyroid Pathology*. iPad application, <https://apps.apple.com/us/app/thyroid-pathology/id1472283511>. Vol. 6 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Jul. 11, 2019.
 9. Bagnasco SM and Racusen LC. *The Johns Hopkins Atlas of Renal Transplant Pathology*. iPad application, <https://apps.apple.com/us/app/renal-transplant-pathology/id1478906695>. Vol. 7 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Sep. 5, 2019.
 10. Birkness-Gartman JE, Montgomery EA, Oshima K. *The Johns Hopkins Atlas of Appendiceal Pathology*. iPad application,. Vol. 8 in the Series: *The Johns Hopkins Atlases of Pathology*, **Cornish TC**, Barker N, and Hruban RH, eds. Version 1.0 released Jul. 9, 2022.

Abstracts (competitive):

1. **Cornish T**, Murphy KM, and Westra WH. PCR-based microsatellite analysis of surgical specimen identity: seven years of clinical application. *Mod Pathol*. 2007 Feb;20(Suppl 2):336A. Poster presentation at USCAP Annual Meeting 2007.
2. Halushka MK, Lu J, and **Cornish T**. MMP1 and TIMP1 expression are decreased in human diabetic glomeruli. *Diabetes*. 2007;56:A201-A202. Poster presentation at American Diabetes Association Annual Scientific Sessions, Chicago, IL 2007.
3. Gurel B, Iwata T, Jenkins RB, Lan F, Hicks JL, Morgan J, Koh CM, **Cornish TC**, Isaacs WB, Luo J, De Marzo AM. Nuclear C-MYC protein overexpression as an early and prevalent marker of human prostate carcinogenesis. *Mod Pathol*. 2008 Jan;21(Suppl 1):159A. Poster presentation at USCAP Annual Meeting 2008.
4. Halushka MK, **Cornish T**, and Jie L. Validation of tissue microarrays for vascular research. *Arch. Pathol. Lab. Med*. 2008 May;132(5):858-859. Oral presentation at the Advancing Practice, Instruction, and Innovation through Informatics (APIII) meeting in Pittsburgh, Pennsylvania, 2007.
5. **Cornish T**, Halushka MK. Color deconvolution for the analysis of tissue microarrays. *Arch. Pathol. Lab. Med*. 2008 May;132(5):855-856. Oral presentation at the Advancing Practice, Instruction, and Innovation through Informatics (APIII) meeting in Pittsburgh, Pennsylvania, 2007.
6. **Cornish T**, Morgan J, Gurel B, and De Marzo AM. FrIDA: An open source framework for image dataset analysis. *Arch. Pathol. Lab. Med*. 2008 May;132(5):856. Oral presentation at

- the Advancing Practice, Instruction, and Innovation through Informatics (APIII) meeting in Pittsburgh, Pennsylvania, 2007.
7. **Cornish TC**, Lecksell K, and Halushka MK. Vascular fibrosis correlates with hypertension, kidney function, and diabetes in a wide range of vascular tissues. *Mod Pathol.* 2009 Jan;22(Suppl 1):77A-78A. Poster presentation at USCAP Annual Meeting 2009.
 8. **Cornish TC**. Tools for manipulating JPEG 2000-based whole slide image formats. *Arch. Pathol. Lab. Med.* 2009 Jul;133(7):1151. Oral presentation at the Advancing Practice, Instruction, and Innovation through Informatics (APIII) meeting in Pittsburgh, Pennsylvania, 2008.
 9. Lam-Himlin D, Park JY, **Cornish T**, Shi C, Montgomery E. Morphologic characterization of gastric polyps in juvenile polyposis and Peutz-Jeghers' syndromes versus gastric hyperplastic polyps. *Mod Pathol.* 2010 Feb;23(Suppl 1):152A. Poster presentation at USCAP Annual Meeting 2010.
 10. Park JY, **Cornish T**, Lam-Himlin D, Shi C, Montgomery E. Lesions arising in the setting of autoimmune metaplastic gastritis (AMAG) in an urban tertiary care setting. *Mod Pathol.* 2010 Feb;23(Suppl 1):160A. Poster presentation at USCAP Annual Meeting 2010.
 11. Shi C, Scudiere JR, **Cornish T**, Lam-Himlin D, Park JY, Montgomery, E. "Clear cell change" in colonic tubular adenoma and corresponding colonic clear cell adenocarcinoma is associated with decreased MUC2 and MUC5 expression. *Mod Pathol.* 2010 Feb;23(Suppl 1):166A. Poster presentation at USCAP Annual Meeting 2010.
 12. **Cornish TC**, Lam-Himlin D, Park JY, Shi C, Montgomery EA. Endoscopic treatment is safe and effective for high grade dysplasia in Barrett's esophagus. *Mod Pathol.* 2010 Feb;23(Suppl 1):141A. Poster presentation at USCAP Annual Meeting 2010.
 13. Ellis CL, **Cornish TC**, Koh C, Hicks JL, Gurel B, De Marzo AM. Increasing levels of a mitochondrial protein marker accompany prostatic carcinogenesis. *Mod Pathol.* 2010 Feb;23(Suppl 1):188-9A. Poster presentation at USCAP Annual Meeting 2010.
 14. Gopal P, **Cornish TC**, Merchant NB, Hruban RH, Shi C. Immunohistochemical assessment of DCBLD2 and PDZD3 expression in pancreatic ductal adenocarcinoma. *Mod Pathol.* 2011 Feb;24(Suppl 1):360A. Poster presentation at USCAP Annual Meeting 2011.
 15. Baras A, Wu PH, **Cornish TC**, Wirtz D. Characterization of tumor heterogeneity using high-throughput morphometric assays (hTMA). *Mod Pathol.* 2012 Feb;25(Suppl 2):390A. Poster presentation at USCAP Annual Meeting 2012.
 16. Samols MA, Smith NE, Vuica-Ross M, Gocke CD, Burns KH, Borowitz MJ, **Cornish TC**, Duffield AS. Software automated counting of Ki-67 proliferation index correlates with pathologic grade and disease progression of follicular lymphomas. *Mod Pathol.* 2012 Feb;25(Suppl 2):366A. Poster presentation at USCAP Annual Meeting 2012.
 17. Gurda GT, Baras AS, Kurman RJ, **Cornish TC**. Subclassifying the Spectrum of Abnormal Endometrial Proliferation with Secretory Change: Supervised Automated Image Analysis as a Tool for Quantitative Assessment of Ki67. *J Pathol Inform.* 2012;3(37):S11. Oral presentation at Pathology Informatics 2012.

18. Mullins J, **Cornish T**, Reese A, Fradin J, Mettee L, Askin F, Luck R, DeMarzo A, Epstein J, Pavlovich C. Ultra High-resolution transrectal ultrasound: a novel technique for enhanced prostate cancer imaging. *J Urol*. 2012 Apr;187(4):e891. Poster presentation at the Society of Urologic Oncology Annual Meeting 2011.
19. Baras AS, McCall M, **Cornish TC**, and Halushka M. Characterization of cell type specific miRNA profiles and application to miRNA profiles derived from tissue. *Mod Pathol*. 2013 Feb;26(Suppl 2):433A. Poster presentation at USCAP Annual Meeting 2013.
20. **Cornish TC**, Tatsas AD, Kim B, Sandone C, Barker NJ and Hruban RH. A reusable iPad application framework for anatomic pathology education. *Mod Pathol*. 2013 Feb;26(Suppl 2):126A. Poster presentation at USCAP Annual Meeting 2013.
21. Chapiro J, Wood L, Lin M, **Cornish TC**, Tacher V, and Geschwind JH. 3D-Evaluation of Tumor Necrosis in HCC Patients after TACE – A Radiologic-Pathologic Correlation. Poster presentation at RSNA 99th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, IL, December 1-6, 2013.
22. Crane GM, **Cornish TC**, Swinnen LJ, Ambinder RF, and Duffield AS. Clinical and Phenotypic Features of Primary CNS Lymphoproliferative Disorders Arising in the Context of Immunosuppressive Treatment. *Laboratory Investigation*. 2014; 94: 344A-344A. Poster presentation at USCAP Annual Meeting 2014.
23. Rishi A, **Cornish TC**, and Park JY. Inadequate Reporting of Helicobacter pylori Infection Status in Gastric Adenocarcinoma Resections *Laboratory Investigation*. 2014; 94: 510A-511A. Poster presentation at USCAP Annual Meeting 2014.
24. **Cornish TC**, Kapoor A, Chakravarti A, and Halushka MK. HPASubC: Tools for High Throughput Subcellular Classification of Human Protein Atlas Images. *Laboratory Investigation*. 2014; 94: 397A-397A. Poster presentation at USCAP Annual Meeting 2014.
25. Fanaian N, Eun K, **Cornish TC**, and Hruban RH. The Johns Hopkins iCareBook for Pancreatic Cancer: A Model for Educational Patient-Centered Mobile Apps. *Laboratory Investigation*. 2014; 94: 147A-147A. Poster presentation at USCAP Annual Meeting 2014.
26. Cuka N, Hempel HA, Sfanos KS, De Marzo AM, and **Cornish TC**. PIP: An Open Source Framework for Multithreaded Image Analysis of Whole Slide Images. *Laboratory Investigation*. 2014; 94: 398A-398A. Poster presentation at USCAP Annual Meeting 2014.
27. Chapiro J, Wood L, **Cornish T**, Lesage D, Charu V, Duran R, Tacher V, Wang Z, Lin M, and Geschwind JH. Radio-pathological correlation of 3D-quantitative contrast-enhanced and functional MRI in HCC patients after TACE-do we see what we treat? *J Vasc Interv Radiol*. 2014; 25:3, S46. Poster presentation at SIR 2014 Annual Scientific Meeting Program Convergence, San Diego, CA, March 22-27, 2014.
28. McClintock DS, **Cornish T**. Poster Presentations 2.0-Using Mobile Device-Based Augmented Reality to Enhance Pathology Poster Presentations. *Laboratory Investigation*. 2015; 95: 399A-399A. Poster presentation at USCAP Annual Meeting 2015.
29. Kulac I, Hicks J, Zheng Q, Fedor H, **Cornish T**, De Marzo A. Inverse Relation of Myc and p27 in Cribriform Pattern Prostate Cancer. *Laboratory Investigation*. 2015; 95: 236A-236A. Poster presentation at USCAP Annual Meeting 2015.

30. Robertson SA, Bhajjee F, Pittman M, Huebner T, **Cornish T**. The H. pylori Gastritis Pattern Without Identifiable Organisms: Correlation with Non-Invasive Laboratory Testing. 2015; 95: 507A-508A. Poster presentation at USCAP Annual Meeting 2015.
31. Robertson SA, Bhajjee F, Pittman M, Huebner T, Baras A, Cimino-Mathews A, **Cornish T**. HER2 Status in Gastroesophageal Adenocarcinomas: Correlation Between Herceptest and FISH Methodologies. *Laboratory Investigation*. 2015; 95: 236A-236A. Poster presentation at USCAP Annual Meeting 2015.
32. Duran R, Mirpour S, Pekurovsky V, Ganapathy-Kanniappan S, Brayton CF, **Cornish TC**, Gorodetski B, Chapiro J, Scherthaner RE, Lin M, Frangakis C, Geschwind JH. Selective hypoxia-activated intraarterial therapy in a rabbit liver tumor model. *J Vasc Interv Radiol*. 2015; 26(2): S7-S8. Oral presentation at SIR Annual Scientific Meeting Program 2015.
33. Gurda G, Baras A, Williams J, **Cornish T**. Alteration of murine Regulator of Calcineurin 1 (Rcan1) results in dysmorphogenesis of pancreatic islets. *FASEB J*. 2015; 29(Suppl 1): 765.1. Poster presentation at Experimental Biology Annual Meeting 2015.
34. Kelly RJ, Thompson E, Zahurak M, **Cornish T**, Cuka N, Abdelfatah E, Taube JM, Yang S, Duncan M, Ahuja N, Murphy A, Anders RA. Adaptive immune resistance in gastro-esophageal cancer: Correlating tumoral/stromal PDL1 expression with CD8+ cell count. *ASCO Annual Meeting Proceedings 33 (15_suppl)*, 4031. Poster presentation at ASCO Annual Meeting 2015.
35. Kulac I, Hicks J, Zheng Q, Fedor H, **Cornish TC**, De Marzo AM. Inverse relation of Myc and p27 in cribriform pattern prostate cancer. *Cancer Research 75 (15 Supplement)*, 2025-2025. Poster presentation at the 106th Annual Meeting of the American Association of Cancer Research, Philadelphia, PA, April 18-22, 2015.
36. Duran R, Mirpour S, Pekurovsky V, Ganapathy-Kanniappan S, Brayton CF, **Cornish TC**, Gorodetski B, Chapiro J, Scherthaner R, Frangakis C, Lin M, Sun JD, Hart CP, Geschwind JH. Hepatic hypoxia-activated intraarterial therapy: effect of selective targeting of hypoxia in a rabbit liver tumor model. *Cancer Research 75 (15 Supplement)*, 5271-5271. Poster presentation at the 106th Annual Meeting of the American Association of Cancer Research, Philadelphia, PA, April 18-22, 2015.
37. Hempel H, Kulac I, Cuka NS, **Cornish TC**, Platz EA, De Marzo AM, Sfanos KS. Characterization of inflammatory markers and mast cells in association with prostate cancer. *Cancer Research 75 (15 Supplement)*, 2342-2342. Poster presentation at the 106th Annual Meeting of the American Association of Cancer Research, Philadelphia, PA, April 18-22, 2015.
38. Hempel HA, Kulac I, Cuka NS, **Cornish TC**, De Marzo AM, Sfanos KS. Abstract A70: Mast cells in prostate cancer race disparities: Are the minutemen of the microenvironment the key? *Cancer Epidemiology Biomarkers & Prevention*. 2015; 24 (10 Supplement), A70-A70. Poster presentation at Seventh AACR Conference on the Science of Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, San Antonio, TX, November 9-12, 2014.
39. Sunshine JC, Berry S, Esandrio J, Xu H, Ogurtsova A, **Cornish T**, Lipson EJ, Anders RA, Taube JM. Measurement of PD-L1 in melanoma: a quantitative antibody comparison.

- Journal for ImmunoTherapy of Cancer* 2015; 3 (Suppl 2), P107. Poster presentation at Society for Immunotherapy of Cancer (SITC) Annual Meeting 2015.
40. Blessing MM, **Cornish TC**, Lehman JR, Jenkins SM, Maleszewski JJ, Aubry MC, Lin PT. Quantitation of Oil Red O Staining Via Digital Imaging Analysis in the Evaluation for Pulmonary Fat Embolization at Autopsy. *Laboratory Investigation*. 2016; 96(Suppl 1s): 4A-5A. Poster presentation at USCAP Annual Meeting 2016.
 41. Thompson E, Taube J, **Cornish TC**, Kelly R, Anders R. PD-L1 Expression and the Tumor Immune Microenvironment of Esophageal Adenocarcinomas. *Laboratory Investigation*. 2016; 96(Suppl 1s): 203A-203A. Poster presentation at USCAP Annual Meeting 2016.
 42. Hempel HA, Kulac I, Cuka NS, **Cornish TC**, De Marzo AM, Sfanos KS. Abstract C73: A relationship between mast cells and the racial disparity of prostate cancer. *Cancer Epidemiology Biomarkers & Prevention*. 2016; 25 (3 Suppl), C73-C73. Poster presentation at Eighth AACR Conference on The Science of Health Disparities in Racial/Ethnic Minorities and the Medically Underserved; November 13-16, 2015; Atlanta, Georgia.
 43. Baena Del Valle JA, Zheng Q, Hicks J, Fedor H, Trock BJ, Morrissey C, Corey E, **Cornish TC**, Sfanos KS, and De Marzo AM. Rapid Loss of RNA Detection by In Situ Hybridization in Stored Tissue Blocks and Preservation by Cold Storage of Unstained Slides. *Laboratory Investigation*. 2017; 98(Suppl 1s): 525A. Poster presentation at USCAP Annual Meeting 2017.
 44. Robertson SA, **Cornish T**. Helicobacter Pylori Detection: Correlation between Tissue Biopsy and Non-Histologic Methods. 2018; 97(Suppl 1): 298-299. Poster presentation at USCAP Annual Meeting 2018, March 17-23, 2018; Vancouver, BC, Canada.
 45. Arnold CA, Arnold MA, **Cornish TC**, Henn PA, Ho L, Kaplan J, Neto AG, Rubin E, Xu C, and Westbrook LM. Assessment of Zoom in Grading of Inflammatory Bowel Disease Dysplasia. *Laboratory Investigation*. 2021; 101(Suppl 1s): 384. Poster presentation at USCAP Virtual Annual Meeting 2021. March 2021.
 46. Westbrook LM, Arnold MA, **Cornish TC**, Henn PA, Ho L, Kaplan J, Neto AG, Rubin E, Xu C, and Arnold CA. Assessment of Zoom Utility in Grading of Dysplasia in Barrett Esophagus (BE). *Laboratory Investigation*. 2021; 101(Suppl 1s): 489-490. Poster presentation at USCAP Virtual Annual Meeting 2021. March 2021.