

**University of California, San Francisco**  
**CURRICULUM VITAE**

**Name:** Carlo Andrei De la Sancha Verduzco, M.D.

**Position:** Assistant Professor of Clinical Pathology, Step 2  
Pathology  
School of Medicine

Assistant Professor of Clinical Pathology

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**EDUCATION**

2007 - 2014	Autonomous University of Baja California School of Medicine	M.D.
2012 - 2014	General Hospital of Mexicali, Rotating Internship and Medical Community Service	Internship Medicine, Surgery, OB-GYN, Emergency Medicine, Family Medicine, Pediatrics
2017 - 2021	Indiana University School of Medicine	Residency Anatomic and Clinical Pathology
2021 - 2022	University of California, San Francisco	Fellowship Cytopathology
2022 - 2023	Indiana University School of Medicine	Fellowship Dermatopathology

**LICENSES, CERTIFICATION**

2016	ECFMG Certificate
2021	License, Medical Board of Indiana
2021	License, Medical Board of California
2021	UCSF Bilingual Clinician Certification, Spanish
2021	Diplomat, The American Board of Pathology, Anatomic and Clinical Pathology
2022	Diplomat, The American Board of Pathology, Cytopathology
2022	ThinPrep and SurePath liquid-based PAP test certificate
2023	Diplomat, The American Board of Pathology, Dermatopathology

## PRINCIPAL POSITIONS HELD

2020 - 2021	Indiana University School of Medicine	Chief Resident	Anatomic Pathology
2023 -	University of California San Francisco, Zuckerberg San Francisco General Hospital	Medical Director, Immunohistochemistry	Pathology

## HONORS AND AWARDS

2013	National Award for Excellence in Medical School	The National Assessment Center for Higher Education (CENEVAL), Mexico
2014	Medical School Achievement Award	The National Assessment Center for Higher Education (CENEVAL), Mexico
2014	Honorable Recognition	Autonomous University of Baja California School of Medicine
2014	Medical School Merit Award	Autonomous University of Baja California School of Medicine
2021	Resident Award for Excellence in Research	Indiana University School of Medicine
2022	Best scientific paper advancing Diversity, Equity and Inclusion	American Society of Cytopathology

## KEYWORDS/AREAS OF INTEREST

Pathology  
Dermatopathology  
Cytopathology  
Fine-Needle Aspiration Biopsy  
Ultrasound-Guided Fine-Needle Aspiration Biopsy  
Medical Education

## CLINICAL ACTIVITIES

### CLINICAL ACTIVITIES SUMMARY

**Cytopathology:** Performing fine-needle aspiration biopsies (FNAs), including ultrasound-guided FNAs. Interpreting cytopathology samples of all types including gyn, non-gyn, and FNA samples.

**Dermatopathology:** Examination of >1000 dermatology patients, including children and adults as part of the ACGME program requirements for Graduate Medical Education in Dermatopathology

## **CLINICAL SERVICES**

2021 - 2022	Fine-Needle Aspiration Biopsy service: Performing and interpreting FNAs (>1000 patients) at UCSF Mission Bay and Zuckerberg San Francisco General Hospital as part of my cytopathology training	one to five days per week
2022 - 2023	Dermatology service: Examination of >1000 dermatology patients, including children and adults	two days per week

## **PROFESSIONAL ACTIVITIES**

### **MEMBERSHIPS**

2017 - present	United States & Canadian Academy of Pathology (USCAP)
2017 - present	American Society for Clinical Pathology (ASCP)
2017 - present	College of American Pathologists (CAP)
2017 - present	Indiana Association of Pathologists (IAP)
2018 - present	American Society of Cytopathology (ASC)
2019 - present	American Society of Dermatopathology (ASDP)
2019 - present	International Society of Dermatopathology (ISDP)
2021 - present	American Society for Investigative Pathology (ASIP)

### **SERVICE TO PROFESSIONAL ORGANIZATIONS**

2019 - 2021	Indiana Association of Pathologists (IAP)	Social Media Committee
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### **SERVICE TO PROFESSIONAL PUBLICATIONS**

2021 - present	Acta Cytologica Journal - Peer Reviewer
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### **INVITED PRESENTATIONS - INTERNATIONAL**

2019	United States and Canadian Academy of Pathology (USCAP) Annual Meeting	Poster: Bile Duct Brushing Cytology: A Large, Single Institutional Retrospective Review with an Emphasis on Sensitivity, Specificity, and Positive Predictive Value.
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2021	International Society of Dermatopathology (ISDP) Annual Meeting (World Cup)	Oral Presentation: Utility of CD123 for Evaluation of Cutaneous Myeloid Sarcoma:
2021	International Society of Dermatopathology (ISDP) Annual Meeting	Poster: Neosporin- induced allergic contact dermatitis with spongiform pustules, an unusual presentation.
2021	International Society of Dermatopathology (ISDP) Annual Meeting	Poster: Primary cutaneous peripheral T-cell lymphoma - NOS, with immunohistochemical heterogeneity and MTOR mutation: a novel finding for targeted treatment.
2022	International Congress of Cytology (ICC) & American Society of Cytopathology (ASC) Joint Meeting	Workshop (Instructor) Ultrasound-Guided Fine-Needle Aspiration Biopsy: 2 hr Didactic

**INVITED PRESENTATIONS - NATIONAL**

2019	American Society of Dermatopathology (ASDP) Annual Meeting	Poster: Syringofibroadenoma with overlapping Clear cell acanthoma and goblet-cell differentiation.
2019	College of American Pathologists (CAP) Annual Meeting	Poster: Aorto-esophageal fistula: A case of fatal upper gastrointestinal bleeding of unknown origin
2020	American Society for Clinical pathology (ASCP) Annual Meeting	Poster: Loss-of-function mutation of ARID1A tumor suppressor gene in a glycogen-rich clear cell mammary carcinoma.
2020	College of American Pathologists (CAP) Annual Meeting	Poster: Fabry Nephropathy: An Institutional Analysis of Histologic, Laboratory and Clinical Outcomes.

2020	College of American Pathologists (CAP) Annual Meeting	Poster: Rare Case of Hemoglobin Cast Nephropathy with Giant Cells.
2021	American Society of Cytopathology (ASC) Annual Meeting	Workshop: Instructor Ultrasound-Guided Fine-Needle Aspiration Biopsy: 2 hr Didactic
2022	American Society of Dermatopathology (ASDP) Annual Meeting	Poster: A progressive and telangiectatic rash in a female patient: An unexpected case of cutaneous collagenous vasculopathy.

### **INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS**

2021	Indiana University School of Medicine, Department of Pathology	Department wide lecture: Utility of CD123 for Evaluation of Cutaneous Myeloid Sarcoma.
2021	University of California, San Francisco, Department of Pathology	Department wide lecture: Mutational Signatures in Human Cancer and Their Role in Determining the Site of Origin of Malignant Neoplasms

### **CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT ACTIVITIES**

2019	USCAP Annual Meeting
2019	Indiana Association of Pathologists Annual Meeting
2019	CAP Annual Meeting
2020	CAP Annual Meeting
2019	American Society of Dermatopathology Annual Meeting
2021	International Society of Dermatopathology Joint Meeting
2022	American Society of Dermatopathology Annual Meeting
2022	Indiana Academy of Dermatology Meeting

**GOVERNMENT AND OTHER PROFESSIONAL SERVICE**

2021 - 2022	Nucleate Bio Bay Area:	Consultant
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**UNIVERSITY AND PUBLIC SERVICE****SERVICE ACTIVITIES SUMMARY**

During my training at Indiana University School of Medicine, I was elected by my peers to represent them in monthly meetings to discuss and implement areas of improvement within the Pathology Residency Program. I also volunteered as the coordinator of a charitable International Pathology Consultation Service. I received whole-slide digital pathology cases from Moi Teaching and Referral Hospital, which serves residents of Kenya, Uganda, and Sudan. I discussed such cases with different pathology experts and provided a consultation report with our impressions and diagnosis. On average, I would write one to five of these reports per week for two years.

Outside of the academic setting, I was an active member of Rotary International for three years. I helped coordinate activities to protect and improve the quality of life for low-class neighborhoods and rural communities in the State of Baja California, México. During the coronavirus pandemic, I volunteered to speak on radio and TV shows to provide health counseling and information updates on the COVID-19 pandemic in Indianapolis and the United States: <https://www.youtube.com/watch?v=lp7bWU3rgvU>

**DEPARTMENTAL SERVICE**

2023 - 2024	Zuckerberg San Francisco General Hospital, Department of Pathology	Faculty Search Committee
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**SERVICE AT OTHER UNIVERSITIES**

2019 - 2021	Resident Curriculum Committee	Indiana University School of Medicine, Department of Pathology
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**COMMUNITY AND PUBLIC SERVICE**

2007 - 2008	National Vaccine Program, Mexico	Vaccine Application
2010 - 2013	Rotaract Club, Rotary International	Member
2013 - 2014	Autonomous University of Baja California Health Care Brigade	Health Care Provider
2014 - 2014	UABC Book Fair, Government of the State of Baja California	Health Care Provider
2020 - 2021	Telemundo Indy	Health Care Counselor
2020 - 2021	Indiana University School of Medicine, Charitable International Pathology Consultation Service	Coordinator

## CONTRIBUTIONS TO DIVERSITY

### CONTRIBUTIONS TO DIVERSITY Contributions to Diversity, Equity & Inclusion Guidance

**Project Stepping Stone of Indiana - Escala Foundation:** Provided counseling to 75 Latino high school students during a college prep program whose goal is to help underrepresented academic achievers pursue their dream to attend college.

## TEACHING AND MENTORING

### TEACHING SUMMARY

At UCSF, as a cytopathology fellow, in addition to one-on-one microscopic sessions, I gave formal didactic cytology lectures to pathology residents at least once a month. I also taught them the proper technique of making smears and performing palpable and ultrasound-guidance fine-needle aspiration (FNA) biopsies. I trained every resident and medical student rotating in the cytopathology service through the use of phantom lesions. Once they showed enough proficiency, I oriented and supervised them in the clinic to perform FNA biopsies with actual patients. Also, I led them to perform rapid-on-site evaluation assessments of FNA biopsies in the interventional radiology department.

As a dermatopathology fellow, a significant proportion of my teaching activities occur daily one-on-one at the microscope with the pathology residents, dermatology residents, and medical students. Once they grasp a basic knowledge about dermatopathology, besides observing how I navigate through our cases, I encourage them to preview some. Once they formulate their opinions, we sit together and discuss and contrast those ideas. I also give formal lectures in an auditorium to pathology and dermatology residents every other month and guide the residents interested in dermatopathology, to work on research projects

### FORMAL TEACHING

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2013 - 2014	Basic Pathology to 3rd year medical students - Autonomous University of Baja California	Lecturer		50
X	2018 - 2018	Breast Pathology - Indiana University Pathology Assistant Graduate Program	Lecturer		7
X	2020 - 2020	Cytomegalovirus and S. agalactie -IUSM, Department of Pathology	Lecturer		20

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2018 - 2018	Cytomegalovirus and other viral inclusions - IUSM, Department of Pathology	Lecturer		20
X	2020 - 2020	Genetic Lesions in MYC and STAT3 drive oncogenic transcription factor overexpression in Plasmablastic lymphoma - IUSM, Department of Pathology	Lecturer		20
X	2020 - 2020	Irritable Bowel Syndrome and Inflammatory Bowel Disease - IUSM, Department of Pathology	Lecturer		10
X	2020 - 2020	Eikenella and Pasteurella - IUSM, Department of Pathology	Lecturer		20
X	2020 - 2020	Naegleria Fowleri - IUSM, Department of Pathology	Lecturer		20
X	2020 - 2020	Acute myeloid leukemia with recurrent genetic abnormalities - IUSM, Department of Pathology	Lecturer		20
	2021 - 2021	Value of FNA cell blocks in the classification of Lymphoma - UCSF, Department of Pathology	Lecturer		40



Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	2021 - 2021	Cytology/Molecular Correlation: (three lectures) - UCSF, Department of Pathology	Lecturer		40
	2022 - 2022	Copy number variations identified in thyroid FNA specimens are associated with Hurthle cell cytomorphology: UCSF, Department of Pathology	Lecturer		40
	2022 - 2022	Cyst fluid metabolites distinguish malignant from benign pancreatic cysts - UCSF, Department of Pathology	Lecturer		40
X	2022 - 2022	Interface dermatitis - IUSM, Department of Pathology and Dermatology	Lecturer		35
X	2022 - 2022	Morphologic features of 352 Spitz Melanocytic proliferations help predict their oncogenic drivers - IUSM, Department of Pathology and Dermatology	Lecturer		15
X	2022 - 2022	Immunohistochemistry in Dermatopathology - IUSM, Department of Pathology and Dermatology	Lecturer		20

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2023 - 2023	Vesiculobullous diseases - IUSM, Department of Pathology and Dermatology	Lecturer		20
X	2023 - 2023	Recent advances in Cutaneous HPV infection - IUSM, Department of Pathology and Dermatology	Lecturer		15
X	2023 - 2023	Genodermatosis - IUSM, Department of Dermatology	Lecturer		20
	2023 -	Dermatopathology Biopsy Review, 1 hour weekly to UCSF Dermatology Residents	Lecturer		5
	2023 - 2023	Introduction to Dermatopathology - Reaction Patterns	Lecturer		4
	2024 - 2024	Glomerular Diseases - School of Medicine	Lecturer		
	2024 - 2024	Liver Pathology - School of Medicine	Lecturer		
	2024 - 2024	GI Pathology - School of Medicine	Lecturer		

### INFORMAL TEACHING

- 2021 - 2022 Basic Cytology Introduction Lecture (monthly to pathology residents rotating in cytopathology)
- 2021 - 2022 FNA workshop (monthly to pathology residents rotating in cytopathology)
- 2022 - 2023 Dermatology Grand Rounds: Pathology of challenging cases (twice a month)
- 2022 - 2023 Melanoma Tumor Board: Pathology of Challenging cases (weekly)
- 2022 - 2023 Dermatopathology biopsy preview (3-5 days a week at the microscope to pathology and dermatology residents rotating in dermatopathology)

**MENTORING SUMMARY**

**IUPUI Graduate Mentoring Center:** Completed a 4-week mentoring workshop to effectively communicate, align expectations, assess understanding, foster independence and promote professional development in a mentor-mentee relationship.

**POSTDOCTORAL FELLOWS AND RESIDENTS MENTORED**

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2019 - 2021	Ravi Bommu	Incoming Pathology Resident		Mentor/Supervision	PGY-4 Pathology Resident
2020 - 2021	Ahmad Alkashash	Incoming Pathology Resident		Mentor/Supervision	PGY-3 Pathology Resident

**RESEARCH AND CREATIVE ACTIVITIES****RESEARCH AND CREATIVE ACTIVITIES SUMMARY**

My research activities involve translational research in general anatomic pathology with an emphasis on cytopathology and dermatopathology. In the field of dermatopathology, I recently described a novel mTOR mutation in a case of primary cutaneous T-cell lymphoma not otherwise specified (pcPTCL-NOS). The patient presented with multiple skin tumors and was eligible for treatment with the mTOR inhibitor TAK-228 under the NCI MATCH clinical trial. TAK-228 is an investigational, oral inhibitor of mTOR previously studied in patients with relapsed/refractory multiple myeloma, non-Hodgkin lymphoma, and Waldenstrom macroglobulinemia. TAK-228 had not been reported in the treatment of pcPTCL-NOS before. The initial treatment response in the patient was dramatic, and only two days after its reintroduction, the skin lesions had a remarkable response. Hence, we support the addition of next-generation sequencing in diagnosing pcPTCL-NOS, which can identify cases with MTOR mutation and may benefit from targeted therapy: De la Sancha, Carlo, et al.." JAAD Case Reports 6.12 (2020): 1342-1344.

Within the cytopathology field, I was one of the leading authors in a study that evaluated the role of Fluorescence in Situ Hybridization (FISH) in pancreatobiliary brushing cytology. Historically, the specificity of brush cytology for the detection of malignant pancreatobiliary strictures is high, but its sensitivity is low to moderate. FISH can be used to detect chromosomal aneuploidy in biliary brushing specimens and may improve the sensitivity of routine cytology. We conducted the largest cytologic study with histologic correlation in 1017 patients and showed that the addition of FISH improved the sensitivity (85% vs 65%), and negative predictive rate (74% vs 49%) of bile duct brushing cytology alone for detecting malignancy.

I have also collaborated in a bi-institutional long-term study to better determine the risk of malignancy on the recently developed Milan System for Reporting Salivary Gland Cytopathology (MSRSGC). We focused on the category of Atypia of Undetermined Significance (AUS), which had been an area of less focus in many prior multi-institutional studies, and reported a risk of malignancy of 37.5%, with 50% of cases exhibiting a prominent

lymphoid component and most commonly representing lymphomas, reactive lymph nodes or sialadenitis: Alruwaili, Fatimah, et al., *Diagnostic Cytopathology* 48.2 (2020): 138-143.

I am also interested in describing the different cytomorphologic findings used in the interpretation of fine-needle aspirate smears and in studying how ancillary techniques can be applied to cytology specimens to increase the precision of diagnosis. Fine needle aspiration biopsy is a cost-effective, minimally invasive method that can be used to obtain material for morphologic evaluation and ancillary studies such as immunohistochemical stains, flow cytometry, cytogenetics, and molecular studies. The ability to perform these ancillary studies on cytologic specimens has dramatically increased the ability to render a specific diagnosis on smaller specimens. In this regard, I have collaborated on the "SCOPE" study. "SCOPE" is an observational, prospective study of HIV-1 infected volunteers designed to provide a specimen bank of samples with carefully characterized clinical data. SCOPE specimens will be used to examine multiple questions involving virologic, immunologic, and host factors involved in HIV-1 infection, progression, non-progression, response to treatment, control of HIV-1 virus, and evolution of drug resistance. My role is to procure lymph node samples by fine-needle aspiration under ultrasound guidance and perform rapid on-site interpretation of the samples. I also recently described cytomorphologic and immunohistochemical clues on aspiration and core needle biopsies to diagnose a unique subtype of PEComa, hepatic angiomyolipoma, which due to its triphasic nature and the wide variability of its different histologic components, can be easily overlooked: De la Sancha, Carlo, et al., *Diagnostic Cytopathology* 49.7 (2021): E238-E241.

Regarding molecular diagnostics, I reported the genetic alterations in invasive breast carcinoma with a glycogen-rich clear cell pattern, an understudied subtype of invasive breast carcinoma of no special type. We found a loss of function of the ARID1A gene, which interestingly indicates similarities in the molecular mechanisms of development of glycogen-rich clear cell carcinomas in different organs, including ovarian, endometrial, and clear cell carcinomas. This has potential therapeutic implications, as data suggest that ARID1A mutations result in epigenetic vulnerabilities in the tumor cells that can be targeted through drugs that inhibit histone deacetylases or the polycomb repressive complex. In addition, loss of ARID1A function may confer sensitivity to immune checkpoint inhibitors, radiation, or other treatments such as PARP and ATR inhibitors: De la Sancha, Carlo, et al." *Case Reports in Oncology* 14.1 (2021): 500-505.

## PEER REVIEWED PUBLICATIONS

1. **De la Sancha C**, Khan S, Alruwaili F, Cramer H, Saxena R. Hepatic angiomyolipoma with predominant epithelioid component: Diagnostic clues on aspiration and core needle biopsies. *Diagnostic Cytopathology*. 2020 Dec 29. <https://doi.org/10.1002/dc.24688>
2. **De la Sancha C**, Burgin C, Warren S, Hoffmann K, Davé U, Nassiri M. Primary cutaneous peripheral T-cell lymphoma, not otherwise specified with mammalian target of rapamycin mutation: A novel finding for targeted treatment. *JAAD Case Reports*. 2020 Sep 14. <https://doi.org/10.1016/j.jdcr.2020.08.041>
3. Strobel T, Ahmed W, **De la Sancha C**, Bohm M, Fischer M. IgA Nephropathy in the Setting of Anti-TNF- $\alpha$  Therapy for Inflammatory Bowel Disease. *ACG Case Reports Journal*. 2020 Sep 1;7(9):e00462. doi: 10.14309/crj.0000000000000462
4. Alruwaili F, Hang JF, Zeng BR, Cramer HM, Lai CR, **De la Sancha C**, Wu HH. Risk of malignancy in " atypia of undetermined significance" category of salivary gland

fine-needle aspiration: A bi-institutional experience. *Diagnostic Cytopathology*. 2020 Feb;48(2):138-43. <https://doi.org/10.1002/dc.24347>

5. **De la Sancha C**, Ruiz-Cordero R, Popnikolov: Genetic Alterations in Invasive Breast Carcinoma with a Glycogen-Rich Clear Cell Pattern: A Case Report. *Case Reports in Oncology*. Mar 2021. <https://doi.org/10.1159/000514978>
6. Khan J, **De la Sancha C**, Saad M, Alkashash A, Ullah A, Alruwaili F, Velazquez Zarate L, Cramer H, Wu H: The Role of Fluorescence in Situ Hybridization in Pancreatobiliary Brushing Cytology: A Large Retrospective Review with Histologic Correlation. *Diagnostics*, 2022, Oct 14. <https://doi.org/10.3390/diagnostics12102486>
7. Zhi Huang, Shao Wei, Zhi Han, Ahmad Alkashah, **Carlo De la Sancha**, Anil V. Parwani, Hiroaki Nitta, Yanjun Hou, Tongxin Wang, Paul Salama, Maher Rizkalla, Jie Zhang, Kun Huang & Zaibo L: Artificial Intelligence Reveals Features Associated with Breast Cancer Neoadjuvant Chemotherapy Responded from Multi-stain Histopathologic Images: *Nature: npj Precis. Onc.* 7, 14 (2023). <https://doi.org/10.1038/s41698-023-00352-5>
8. Nikka Khorsandi, Chien-Kuang Cornelia Ding, Christopher VandenBussche, **Carlo De la Sancha**, Nancy Greenland, Poonam Vohra: Urine Cytology in Patients with Gender Confirmation Surgery and Hormone Therapy: Evaluation of Urine Cytology Performance in an Underserved Patient Population: *Journal of the American Society of Cytopathology*: Accepted for publication
9. **Carlo De la Sancha**, Matthew Kuhar, Adele Kraft, Ahmed Alomari: Primary Mucoepidermoid Carcinoma of The External Auditory Canal with a CRTC1-MAML2 fusion: A Case Report and a Review of Literature: *Journal of Cutaneous Pathology*: In review

#### **NON-PEER REVIEWED PUBLICATIONS**

1. **De la Sancha C**, Zhang C: Case of the month: A 64-year old man with an 8-year history of a slow growing lower extremity soft tissue mass: Extraskeletal myxoid chondrosarcoma. *Indiana Association of Pathologists [Internet]* March 2019. <https://indianapath.org/page-1853324>

#### **BOOKS AND CHAPTERS**

1. **Carlo De la Sancha**, Amar Mirza, Boris Bastian; Molecular Pathology of Melanoma and Nonmelanoma skin cancer; Chapter 17; In *Textbook of Molecular Surgical Pathology*, 2nd Edition, Published Nov 1st, 2023: <https://doi.org/10.1007/978-3-031-35118-1>

## SIGNIFICANT PUBLICATIONS

1. Zhi Huang, Shao Wei, Zhi Han, Ahmad Alkashah, **Carlo De la Sancha**, Anil V. Parwani, Hiroaki Nitta, Yanjun Hou, Tongxin Wang, Paul Salama, Maher Rizkalla, Jie Zhang, Kun Huang & Zaibo L: Artificial Intelligence Reveals Features Associated with Breast Cancer Neoadjuvant Chemotherapy Responded from Multi-stain Histopathologic Images: Nature: npj Precis. Onc. 7, 14 (2023). <https://doi.org/10.1038/s41698-023-00352-5>

This is a study that used H&E and IHC whole slide digital images to create a computational algorithm that predicted neoadjuvant chemotherapy clinical outcomes in patients with breast cancer based on pre-treatment histopathologic images. My role in this study was to review the H&E and IHC histopathologic images and label each of them according to different segmentation classes: stromal region, tumoral region, lymphocytes aggregated region, and excluded region.

## CONFERENCE ABSTRACTS

1. **Carlo De la Sancha**, Rohit Gulati: Myeloid neoplasm with PDGFRA rearrangement. Abstract for the Society for Hematopathology/European Association for Hematopathology Workshop, Phoenix AZ, 2019
2. **Carlo De la Sancha**, Lester Layfield, Howard Wu, Harvey Cramer: Bile Duct Brushing Cytology: A Large, Single Institutional Retrospective Review with an Emphasis on Sensitivity, Specificity, and Positive Predictive Value. Abstract for the United States and Canadian Academy of Pathology Annual Meeting; National Harbor, MD, 2019.
3. **Carlo De la Sancha**, Ahmed Alomari: Syringofibroadenoma with overlapping Clear cell acanthoma and goblet-cell differentiation. Abstract for The American Society of Dermatopathology; October, San Diego, CA, 2019.
4. **Carlo De la Sancha**, Fan Rong: Aorto-esophageal fistula: A case of fatal upper gastrointestinal bleeding of unknown origin. Abstract for the College of American Pathologists; September, Orlando, FL, 2019.
5. Johnathan Ryder, **Carlo De la Sancha**, Cole Beeler: A female with persistent fevers and Bilateral Nephromegaly. Abstract for the for IDWeek Fellows' Day Workshop, 2019
6. **Carlo De la Sancha**, Roberto Ruiz-Cordero R, Nikolay Popnkiolov: Loss-of-function mutation of ARID1A tumor suppressor gene in a glycogen-rich clear cell mammary carcinoma. Abstract for the American Society for Clinical pathology. September, Austin, TX, 2020.
7. **Carlo De la Sancha**, Andrew Tharp, Michael Eadon, Carrie Phillips: Fabry Nephropathy: An Institutional Analysis of Histologic, Laboratory and Clinical Outcomes. Abstract for the College of American Pathologists; October, Vegas. NV, 2020.
8. **Carlo De la Sancha**, Andrew Tharp, Michael Eadon, Carrie Phillips: Rare Case of Hemoglobin Cast nephropathy with Giant Cells. Abstract for the College of American Pathologists; October, Vegas. NV, 2020.
9. **Carlo De la Sancha**, Terrence Katona: Neosporin-induced allergic contact dermatitis with spongiform pustules, an unusual presentation. Abstract for the International Society of Dermatopathology Joint Meeting; April, San Francisco, CA, 2021.

10. **Carlo De la Sancha**, Callie Burglin, Simon Warren, Utpal Davé, Kristin Hoffmann, Mehdi Nassiri: Primary cutaneous peripheral T-cell lymphoma - NOS, with immunohistochemical heterogeneity and MTOR mutation: a novel finding for targeted treatment. Abstract for the International Society of Dermatopathology Joint Meeting; April, San Francisco, CA, 2021.
11. Reza Musavi, **Carlo De la Sancha**, Tze Wai Tiffany, Poonam Vohra: Evaluation of the transitional zone and nucleated squamous cell elements in the cytology-histology correlation of an institutional anal cancer screening protocol. Abstract for American Society of Cytopathology 70th Annual Scientific Meeting; November, Baltimore, MD, 2022.
12. Chien-Kuang Cornelia Ding, Christopher VandenBussche, **Carlo De la Sancha**, Nancy Greenland, Poonam Vohra. Urine Cytology in patients with Gender Confirmation Surgery and Hormone Therapy: Highlighting the Performance of Urine Cytology in an Underserved Patient Population. Abstract for the American Society of Cytopathology 70th Annual Scientific Meeting: November, Baltimore, MD, 2022.
13. **Carlo De la Sancha**, Ravi Bommu, Alison Klenk, Matthew Kuhar, Brandon Umphress: A progressive and telangiectatic rash in a female patient: An unexpected case of cutaneous collagenous vasculopathy. Abstract for The American Society of Dermatopathology; October, Chicago, IL, 2022.

#### **OTHER CREATIVE ACTIVITIES**

1. **Telemundo Indy: COVID-19** : I provided several information updates and counseling during the coronavirus pandemic on radio and TV:  
<https://www.youtube.com/watch?v=lp7bWU3rgvU>