# **Robert P. Seifert**

Curriculum Vitae

Updated 6/30/2021

# **Current Contact Information**

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Email: seifert.md@gmail.com

FL Medical License: ME 123797 (active) GA Medical License: 81913 (active)

NPI: 1750657383

# **Personal Information**

Citizenship: U.S. Citizen

## **Current Position**

Assistant Professor, University of Florida 2017 - Present

## **Education**

M.D. 2012; University of Florida - Cum Laude

B.S. 2008; University of Florida – Summa Cum Laude

Major: Microbiology & Cell Science

Minor: Chemistry

## **Training**

Hematopathology Fellowship – University of Florida,	2016 - 2017
College of Medicine	
Anatomic and Clinical Pathology Residency-	2012 - 2016
University of South Florida, Morsani College of Medi	cine

## **Board Certifications**

Anatomic and Clinical Pathology	2016 - Present
Hematopathology	2017 - Present

# **Administrative Appointments**

Member, UF COM Medical School Admissions Committee	2021 – Present
Member, UF College of Medicine Curriculum Committee	2021 - Present
Unit Director, UF Hematopathology	2019 - Present
Director, UF Hematopathology Fellowship Program	2019 - Present
Medical Director, UF Health Flow Cytometry Laboratory	2019 - Present
Member, UF COM Medical School Interview Committee	2018 - Present

Interviewing 16 prospective medical students per ye Medical Director, UF Health Histology Laboratory	ear 2017 - 2019
Leadership & Committees	
Member, Florida Society of Pathology, Education Committee	2021 - Present
Member, Medical School Pathology Interest Group Faculty Search Committees: Hematopathology, Dermatopathology	2019 - Present 2019 - Present
Founding member, UF Health Anatomic Pathology Leadership Committee, Led EPIC Beaker AP implementations	2017 - Present
CAP inspector, Hematology and Flow Cytometry Chair, Immunohistochemistry QA and Utilization Committee	2017 – Present 2017 – 2019
Member, UF Pathology Residency Program Clinical Competency Committee Program Evaluation Committee	2017 – Present
Professional Organizations and Accomplishments Reviewer, Journal of Hematopathology Reviewer, Human Pathology: Case Reports Mentor, Florida Society for Pathology Mentorship Program Founding Member, Digital Anatomic Pathology Academy Reviewer, Journal of Medical Case Reports Reviewer, ASCP Case Reports Fellow, College of American Pathologists Member, Florida Society of Pathologists Member, United States & Canadian	2021 - Present 2020 - Present 2020 - Present 2019 - Present 2018 - Present 2015 - Present 2017 - Present 2012 - Present 2013 - Present 2018 - Present
Member, Florida Blue Key Florida's Premier Leadership Honorary Representative, College of American Pathologists Resident's Forum	2014 - 2015 2007 - Present 2014 - 2016
Medical School Actor, White Coat Company Productions of Aladdin and Snow White. Volunteer, Gainesville Community Ministry Clinic Communications Chair, UF College of Medicine c/o 2012	2008 - 2012 2008 - 2012 2009 - 2012

Member, Christian Medical and Dental Association 2008 - 2012 Treasurer, Clinical Neuroscience Pathways 2009 - 2010 Interest Group

Undergraduate

Associate Producer, Creative Division, Gator Growl 2006

The World's Largest Student-Run Pep Rally

Budget: \$500,000 & over 300 staff members.

Director, Special Effects, Gator Growl 2005

**Professional Development** 

"Interrupting Bias in Faculty Searches" 6/25/2020

Special Series: Everyday Leadership for COM Employees

UF College of Medicine - Human Resources

American Board of Pathology, CertLink MOC Program, 2019 – Present

Graduate, UF GMS5905 Informatics for Pathology 2018

Practice and Research, graduate course exploring

"big data" analysis with Python and PANDAs.

Graduate, ASCP Lab Management University 2015 Graduate, IHI Open School for Patient Safety 2015

# **Grants, Contracts and Awards**

(2020) HuBMAP-Thymus, HuBMAP-Spleen, and HuBMAP-Lymph Node National Institutes of Health

**Title**: The Human BioMolecular Atlas Program (HuBMAP):

Thymus, Spleen and Lymph Node projects

Aim: AIM I: Establish systematic, anatomical best practices/benchmarks for collection, preservation, validation and standardization of QC protocols (SOPs) for acquiring and handling organ donor grade human thymus; AIM II: Reconstruct the three-dimensional (3D) human thymus; AIM III: Immunophenotype human thymus cells by fluorescence activated cell sorting (FACS). As the thymus is uniquely involved in T lymphocyte development, thymocyte and dendritic cell (DC) populations from dispersed thymus and peripheral blood mononuclear cells from the same patient will be defined by FACS and the immune repertoires compared. Isolated cell subsets will serve as the source for RNA expression profiling (AIM IVB) to guide the selection of markers used in AIMs II and IV; and AIM IV; ultimately, to determine the molecular composition and gene expression within the normal 3D human thymus.

**Role**: Co-Investigator on Thymus, Spleen and Lymph Node projects as well as Anatomical Structures, Cell Types, and

Biomarker (ASCT+B) tables project.

**Funding**: NIH HuBMAP (total 5.65% salary support)

Clinical Research Committee Grant

University of Florida College of Medicine, Department of Pathology, Immunology and Laboratory Medicine

**Title:** Next Generation Sequencing Studies as an Adjunct to Detection of Cutaneous Lymphoproliferative Disorders - A combination of molecular, immunohistochemical and histologic studies.

**Aim**: To identify pathogenic variants that support a neoplastic diagnosis by performing clinical next generation sequencing studies on 30 cutaneous lymphoproliferative disorder samples.

**Role**: Principle Investigator

**Budget**: \$10,000

Clinical Research Committee Grant (2017)

> University of Florida College of Medicine, Department of Pathology, Immunology and Laboratory Medicine

**Title**: Improvement of Detection of Minimal Residual Disease of B Cell Acute Lymphoblastic Leukemia by a Multi-Dimentional Approach: a combination of molecular and phenotypic studies Aim: To perform B cell clonality and flow cytometry phenotyping studies in 50 bone marrow samples from B-ALL patients for MRD

detection

Role: Co-investigator

**Budget**: \$3,000

## **Honors**

Professional

Honoree, 40 Under Forty, American Society for 2021

Clinical Pathology.

Member Spotlight, Florida Society of Pathologists 2021

2020 Exemplary Teacher Award

UF College of Medicine

Excellence in Resident Education 2019-2020

Residents in the Department of Pathology, Immunology, and Laboratory Medicine at

the University of Florida

NBME Invitational Conference for Educators One of two UF faculty selected to attend. Conference cancelled due to pandemic.	June 2020
Residency	
Intersociety Council for Pathology Information Travel Award	July 2016
Dr. Henry A. Azar Outstanding Resident of the Year Award	May 2016
University of South Florida Resident In-Service Exam Certificate of Achievement	May 2016
Nominee, ASCP 40 Under 40 Award Florida Society of Pathologists, Poster Award, Second Place	2016 Feb 2016
Medical School	
Service Award Equal Access Clinics	April 2010
Helper T-Cell Award for Most Helpful Classmate UF College of Medicine c/o 2012	May 2010

# **Formal Mentoring**

#### Mentees:

- Dr. Odille Mejia, current resident at Mount Sinai Medical Center, Miami Beach, FL.
  - o Florida Society for Pathology Mentorship program
- Dr. James Isom, current UF Hematopathology Fellow, University of South Florida Dermatopathology Fellow 2020-2021.
- Dr. Maira Gaffar, current UF Pathology Resident, UF Hematopathology Fellow 2020-2021
- Dr. Joanna Chaffin, Hematopathologist at UF
- Dr. Yu "Sunny" Yang, Hematopathologist at UF

# **Course Development and Teaching**

(2021) University of Florida Pathology Department Grand Rounds Seminar, "All That is Gold Does Not Glitter: Surgical pathology pitfalls in hematolymphoid malignancy diagnosis." Location: University of Florida, Gainesville. Audience: Faculty and residents. August, 4 2021.

BMS6300 – UF College of Medicine, Fundamentals of Microbiology and Immunology, 20 hours, Lectures:

Overview of Immunology I-II, The Innate Immune System I-II,

B cells and Antibodies I-II, Antigen Presentation, T cells at Work I-II, Memory, Restraining the Immune System, Tumor Immunology, Immunotherapy.

Audience: UF first year medical students

BMS6631 – UF College of Medicine, Hematology, Audience: UF second year medical students, Lectures:

Leukemia Leukemia Lab Lymphoma Lymphoma Lab

"Don't Fear the Smear" – Pathology resident blood smear review, 1 hour / monthly sessions. Audience: UF pathology residents

(2020)

"Don't Fear the Smear" – Pathology resident blood smear review, 1 hour / monthly sessions. Audience: UF pathology residents

"23 Without Me: The Dangers of Direct-to-Consumer Genomic Testing", Pathology Interest Group, Exploration of techniques, ethics, perceptions and realities of direct to consumer genomic testing.

Audience: UF Medical Students.

UF Hematology Oncology Fellow - Wet Lab Instructor, 2 hours, Audience: UF Hematology-oncology fellows

UF Hematology Oncology Fellow Orientation, 2 hours, Audience: UF Hematology-oncology fellows

Case Conference, UF Hematology Oncology, 2 hours/month, Audience: UF Hematology-oncologists and fellows

DEN6350 – UF College of Dentistry, General Pathology, 8 hours, Audience: UF second year dental students, Lectures:

Genetic Disease Renal Pathology Immunodeficiency Clinical Transplantation Leukemia Lymphoma

Instructor Evaluation: 5 of 5

BMS6631 - UF College of Medicine, Hematology, 7 hours, Audience:

UF second year medical students, Lectures:

Leukemia

Leukemia Lab

Lymphoma

Lymphoma Lab

Instructor Evaluation: 4.38 of 5

UF Pathology Resident Didactic, Audience: UF pathology residents, Lectures:

**RISE Review** 

Diffuse Large B cell Lymphoma

Big Ugly Lymphomas

The Big 4 Small Lymphomas

(2019) "Don't Fear the Smear" – Pathology resident blood smear review, monthly sessions. Audience: UF pathology residents

UF Hematology Oncology Fellow - Wet Lab Instructor Audience: UF Hematology-oncology fellows

DEN6350 – UF College of Dentistry, General Pathology, Audience: UF second year dental students, Lectures:

Genetic Disease

Renal Pathology

Immunodeficiency

Clinical Transplantation

Leukemia

Lymphoma

BMS6631 – UF College of Medicine, Hematology, Audience: UF second year medical students, Lectures:

Leukemia

Leukemia Lab

Lymphoma

Lymphoma Lab

(2018) UF Hematology Oncology Fellow - Wet Lab Instructor, Audience: UF Hematology-oncology fellows

"Don't Fear the Smear" – UF Pathology resident blood smear review, monthly sessions, Audience: UF pathology residents

DEN6350 – UF College of Dentistry, General Pathology, Audience: UF second year dental students, Lectures:

Genetic Disease Immunodeficiency Clinical Transplantation

BMS6631 – UF College of Medicine, Hematology, Audience: UF second year medical students, Lectures:

Leukemia Leukemia Lab Lymphoma Lymphoma Lab

UF Pathology Resident Didactic, Audience: UF pathology residents, Lectures:

Introduction to Microscopy

RISE Review

Myelodysplasia and Myeloproliferative syndromes

Journal Club - Hematopathology

Lymphoma slide review

Approach to Blasts on a Smear

Plasma Cell Neoplasms

Big Ugly Lymphomas

The Big 4 Small Lymphomas

Introduction to Bone Marrow microscopy

(2017) BMS6631 – UF College of Medicine, Hematology, Audience: UF second year medical students, Lectures:

Leukemia

Leukemia Lab

Lymphoma

Lymphoma Lab

- (2016) TampaPath.com I produced and currently maintain a free website with curated video lectures for molecular genomic education in pathology residency. Some videos I produced independently as well.
- (2013) Moffitt Cancer Center Grand Rounds in Pathology,
  Topic: "Salivary Gland Cytology, A Pattern-Based Approach"
  Audience: Moffitt Cancer Center faculty and USF residents

# Non-Peer Reviewed Publications (in reverse chronological order)

(2020) Digital Anatomic Pathology Academy. A cloud based platform which provides annotated digital slides with diagnosis and relevant morphologic/ancillary test information. Editors: Rajendra Singh,

Marilyn Bui, Eric Glassy. Case Contributor and Founding Member.

- (2018) Burkitt Lymphoma: Updates in Etiology, Diagnosis, Molecular Genetics and Treatment Options. Editors: Ling Zhang, M.D., and Lubomir Sokol, M.D., Ph.D. **Textbook chapter contributor**:
  - Chapter 4. Diagnostic Approaches in Burkitt Lymphoma and Its Mimickers (Melinda Fang, Kenian Liu, **Robert Seifert** and Ling Zhang)
- (2016) Healing Pathology Glossary in The Healing Art of Pathology. Marilyn M. Bui and Katherine A. Galagan (eds). **Textbook chapter contributor.** Summer 2016. CAP Press.
- (2014) Atlas of Soft Tissue and Bone Pathology. Leslie G. Dodd, MD and Marilyn M. Bui, MD, PhD. **Textbook chapter contributor.** Demos Medical Publishing, New York City, New York, 2014.

# Peer Reviewed Publications (in reverse chronological order)

- 1. KD Weaver(r), Y De Los Santos(r), M Gaffar(r), MC Zona, S Flax, S Chamala, RP Seifert, and AK Esnakula. 2021. Wrong Tissue in Block: Grossing Gone Wrong can be Made Right with Tailored Informatics Solutions. American Journal of Clinical Pathology. aqab011, May 3 2021: 1-8. https://doi.org/10.1093/ajcp/aqab011
- 2. Robert P. Seifert, and Scott Gregory(r). 2021. Bronchoalveolar Lavage Fluid Review in Acute Promyelocytic Leukemia Differentiation Syndrome. Journal of Hematopathology. 2021: 1-4. https://doi.org/10.1007/s12308-020-00428-2
- Joanna Chaffin, Sayedamin Mostofizadeh(r), and Robert Seifert.
   2021. CD37 and CD44 Evaluation by Flow Cytometry: Can these markers improve diffuse large B cell lymphoma characterization?.
   Journal of Hematopathology. 2021: 1-10.
- 4. S S Radhakrishnan Iyer, Z Jin(r), R Seifert, and N H Dang. 2020. Bilateral pseudohypopyon causing white eyes in a patient with lymphoma. The Lancet. Volume 395, Issue 10233: e74, PMID: 32334711. https://doi.org/10.1016/S0140-6736(20)30610-3
- M Kavesh(r), Y Li, P Li, M Shahid(f), J Chaffin(f), and R Seifert. 2020. IgH gene rearrangement by PCR as an adjunct to flow cytometric analysis for the detection of minimal residual disease in patients with B lymphoblastic leukemia. J Hematopathol. 13(3): 137-142.

- https://doi.org/10.1007/s12308-020-00406-8
- 6. Minish J M(f), Hamed N, Seifert R, and Kelkar A H(f). 2020. T-Cell Large Granular Lymphocytic Leukemia as a Cause for Severe Neutropenia. Cureus. 12(9): e10186: 1-6. https://doi.org/10.7759/cureus.10186
- 7. Daniel Gipson, Trisha Larkin(f), Robert Seifert, and Vandy Black. 2020. Romiplostim as a therapeutic intervention for tacrolimus-induced immune thrombocytopenia in a pediatric cardiac transplant patient. Journal of Pediatric Hematology/Oncology. Nov 11, PMID: 33181586: https://doi.org/10.1097/mph.00000000001994
- 8. Robert P. Seifert, Vektra Casler(r), Nada Al Qaysi(r), Shaileshbhai Revabhai Gothi, Leah Williams, Patricia R. Christensen, Sherri Flax, and Srikar Chamala. 2020. Informatics Driven Quality Improvement in the Modern Histology Lab. Journal of the American Medical Informatics Association. JAMIA Open, ooaa066: https://doi.org/10.1093/jamiaopen/ooaa066
- 9. Ashlie Rubrecht(r), Robert P Seifert, and Archana Shenoy. 2020. Maternal Hematologic Neoplasms during Pregnancy: Histologic findings in the Placenta. Placenta. Volume 104, 2021: 195-198. https://doi.org/10.1016/j.placenta.2020.12.010
- M Shahid(f), R Seifert, P Li, and Y Li. 2019. Leukemic presentation of high-grade B cell lymphoma with MYC and BCL2 rearrangement—a series of two cases and review of literature. J Hematopathol. 12(1): 41–45. https://doi.org/10.1007/s12308-019-00342-2
- 11. Nwosu-Iheme A(f), Ghanem S(f), Patel A(f), Zhuang Y(f), Seifert R, and Murthy H. 2018. A rare presentation of hemophagocytic lymphohistiocytosis in a patient with untreated chronic lymphocytic leukemia: A case report and review of the literature. Hematol Leuk. 6:2: 1-5. http://dx.doi.org/10.7243/2052-434X-6-2
- John, Sooraj, Antonia, S, Rose, T., Seifert, R. P, Centeno, B. A., Wagner, A. S., and Creelan, B. C.. 2017. Progressive hypoventilation due to mixed CD8+ and CD4+ lymphocytic polymyositis following tremelimumab-durvalumab treatment. Journal for immunotherapy of cancer. 5(1): 54, PMID: 28716137. https://doi.org/10.1186/s40425-017-0258-x
- 13. H Xu, RP Seifert, X Niu, Y Li, and MM Bui. 2016. The Establishment

- and Utility of a Free Online Database of Primary Bone Tumors. Pathol Oncol Res. 22(1), PMID: 26377426: 129-33. https://doi.org/10.1007/s12253-015-9982-z
- 14. Seifert RP, Agosti SJ, Accomando JD, and Jukic D. 2015.
  Crystalcryoglobulinemia in a Patient with Underlying Monoclonal
  Gammopathy of Undetermined Significance. American Society for
  Clinical Pathology Case Reports. HP15-7: 1-17.
- 15. Seifert RP, Bulkeley W, Zhang L, Menes M, and Bui MM. 2014. A practical approach to diagnose soft tissue myeloid sarcoma preceding or coinciding with acute myeloid leukemia. Ann Diagn Pathol. 18(4), PMID: 24969631: 253-260. https://doi.org/10.1016/j.anndiagpath.2014.06.001
- 16. Seifert RP, Marilyn Bui, and Jane Messina. 2014. Mutated BRAF V600E in Poorly Differentiated Spindle Cell Malignancies Following the Initial Diagnosis of Melanoma in Another Site: A Diagnostic Challenge. American Journal of Clinical Pathology. 142.suppl\_1: A248-A248. https://doi.org/10.1093/ajcp/142.suppl1.248
- 17. Seifert RP, McNab P(f), Sexton WJ, Sawczyn KK, Smith P, Coppola D, and Bui MM. 2012. Rhabdomyomatous differentiation in Wilms tumor pulmonary metastases: a case report and literature review. Ann Clin Lab Sci. Fall;42(4), PMID: 23090738: 409-16. <a href="http://www.annclinlabsci.org/content/42/4/409.short">http://www.annclinlabsci.org/content/42/4/409.short</a>

# Presentations (in reverse chronological order) International

#### Refereed

- 1. A Rubrecht<sub>(r)</sub>, **R Seifert**, and <u>A Shenoy</u>. *Poster*. Maternal Hematologic Neoplasms During Pregnancy: Review of placental findings. United States and Canadian Academy of Pathology 109th Annual meeting. Los Angeles, CA. Mar 3, 2020 Mar 3, 2020.
- 2. K Weaver<sub>(r)</sub>, M Zona, **R Seifert**, and <u>A Esnakula</u>. *Poster*. Wrong Tissue in Block: Grossing gone wrong can be made right by tailored informatics solutions. United States and Canadian Academy of Pathology 109th Annual meeting. Los Angeles, CA. Mar 2, 2020 Mar 2, 2020.
- 3. **Robert P. Seifert**, L Sokol, and <u>L Zhang</u>. *Poster*. Unicentric and Multicentric Castleman's Disease in HIV-negative patients: A Case Series. United States and Canadian Academy of Pathology. San Diego, California. Mar 3, 2014.

#### National

#### Invited

**Robert P. Seifert**, and <u>A Borkowski</u>. *Lecture*. Modular Mobile-Based Molecular Genomics Education Tool: A pilot for graduate molecular pathology education. Association of Pathology Chairs Annual Meeting. San Diego, CA. Jul 14, 2016 - Jul 14, 2016.

#### Refereed

- 1. A Byrd<sub>(f)</sub>, and **R Seifert**. *Lecture*. Burkitt-like lymphoma in a genitourinary excision. American Institute for Radiologic Pathology. Virtual. Oct 19, 2020 Nov 13, 2020. https://www.airp.org/Resident-Courses/Four-Week-Course
- N Al Qaysi<sub>(r)</sub>, I Al-Ani, R Seifert, P Li, J Chaffin, L Yang, O Bohn, and M Leon. Poster. Plasmablastic Lymphoma Involving Mediastinal Lymph Nodes and Pleural Cavity: Unusual Presentation of a Rare Entity (Report of a Case). College of American Pathologists Annual Meeting. Virtual. Oct 10, 2020 Oct 13, 2020.
- 3. E Ray<sub>(r)</sub>, S Gregory<sub>(r)</sub>, S Mostofizadeh<sub>(r)</sub>, J Chaffin, L Yang, and <u>R Seifert</u>. *Poster*. Young and Naïve: Naïve B cells are a Diagnostic Pitfall in Pediatric Tonsillectomies. College of American Pathologists Annual Meeting. Virtual. Oct 10, 2020 Oct 13, 2020.
- 4. Adam E. Bennett<sub>(r)</sub>, Jonathan Braue, Hoka Nyanda, **Robert P. Seifert**, Eric Haura, Neil A. Fenske, <u>Jane Messina</u>, and <u>Mary H. Lien</u>. *Lecture*. Paraneoplastic Granuloma Annulare is Distinct from Mimetic Metastasis. American Academy of Dermatology, 74th Annual Meeting. Washington, D.C. Mar 4, 2016 Mar 4, 2016.
- 5. **Robert P. Seifert**, and MM Bui. *Lecture*. Electronic Atlas of Epithelioid Soft Tissue Tumors: A Framework for Pathology Atlas "App" Development. Digital Pathology Association: Pathology Visions 2015. Boston, MA. Oct 13, 2015 Oct 13, 2015.
- 6. **Robert P. Seifert**, and MM Bui. *Poster*: Electronic Atlas of Epithelioid Soft Tissue Tumors Pathology "App" Development Made Easy. College of American Pathologists meeting 2015. Nashville, TN. Oct 5, 2015 Oct 5, 2015.
- 7. **Robert P. Seifert**, MM Bui, and <u>J Messina</u>. *Poster*. Mutated BRAF V600E in poorly differentiated spindle cell malignancies following the initial diagnosis of melanoma in another site: A diagnostic challenge. American Society for Clinical Pathology. Tampa, FL. Oct 8, 2014 Oct 8, 2014.
- 8. **Robert P. Seifert**, E Sagatys, MM Bui, and <u>L Zhang</u>. *Poster*. Lessons Learned From A Case Of Incidental Composite Small Lymphocytic

Lymphoma and Sarcoidosis. College of American Pathologists meeting. Orlando, FL. Oct 13, 2013 - Oct 13, 2013.

- 9. **Robert P. Seifert**, and <u>L Zhang</u>. *Poster*. Rare Clinical Scenario: Aggressive Plasma Cell Myeloma Presenting With Breast Plasmacytoma In A 28-year-old Woman. College of American Pathologists meeting. Orlando, FL. Oct 13, 2013 Oct 13, 2013.
- 10. Robert P. Seifert, P McNab, W J Sexton, K K Sawczyn, P Smith, D Coppola, and M M Bui. Poster. Rhabdomyomatous Differentiation in Wilms Tumor Pulmonary Metastases: A Case Report and Literature Review. College of American Pathologists meeting. San Diego, California. Sep 10, 2012 Sep 10, 2012.

#### State

#### Refereed

- 1. M Gaffar<sub>(r)</sub>, J Reppucci<sub>(r)</sub>, C Gonsalves<sub>(r)</sub>, L Yang, and <u>R Seifert</u>. *Poster*. Blastoid Variant of Mantle Cell Lymphoma in Leukemic Phase Masquerading as an Acute Leukemia. Florida Society of Pathologists Winter Meeting. Orlando, FL. Feb 23, 2019 Feb 23, 2019.
- 2. Y Zhuang, **R Seifert**, <u>Y Li</u>, and L Yang. *Poster*. T-cell Lymphomas with Reed-Sternberg Cells: A report on two cases. Florida Society of Pathologists Winter Meeting. Orlando, FL. Feb 11, 2017 Feb 11, 2017.
- 3. **Robert P. Seifert**, and MM Bui. *Poster.* Electronic Atlas of Epithelioid Soft Tissue Tumors Pathology "App" Development Made Easy. Florida Society of Pathologists Winter Meeting. Orlando, FL. Feb 13, 2016 Feb 13, 2016. Poster Competition Award: 2nd Place

#### Local

#### **Invited**

**Robert P. Seifert**. *Lecture*. Moffitt Cancer Center Grand Rounds in Pathology: "Salivary Gland Cytology, A Pattern-Based Approach". Moffitt Cancer Center. Moffitt Cancer Center. Sep 11, 2013 - Sep 11, 2013. Grand Rounds

#### Refereed

1. Chaffin J<sub>(f)</sub>, Li P, Li Y, Yang L, and <u>Seifert R</u>. *Lecture*. Investigation of CD37 and CD44 Expression in B-cell Lymphoproliferative Disorders by Flow Cytometry. University of Florida College of Medicine, Dept. of Pathology, Immunology and Laboratory Medicine, 37th Annual Resident Research Day Symposium. Gainesville, FL. Jun 1, 2019 - Jun 1, 2019. Winner: Best Oral Presentation

- 2. Kavesh M<sub>(r)</sub>, Li Y, Li P, Shahid M<sub>(f)</sub>, Chaffin J<sub>(f)</sub>, and Seifert R. Lecture. IgH Gene Rearrangement by PCR as an Adjunct to Flow Cytometric Analysis for the Detection of Minimal Residual Disease in Patients with B-Cell Acute Lymphoblastic Leukemia. University of Florida College of Medicine, Dept. of Pathology, Immunology and Laboratory Medicine, 37th Annual Resident Research Day Symposium. Gainesville, FL. Jun 1, 2019 Jun 1, 2019.
- 3. Shahid M<sub>(f)</sub>, **R Seifert**, and <u>Y Li</u>. *Lecture*. IGH gene rearrangement by PCR serving as an adjunct tool to flow cytometric detection of B-ALL MRD. University of Florida College of Medicine, Dept. of Pathology, Immunology and Laboratory Medicine, 36th Annual Resident Research Day Symposium. Gainesville, FL. Jun 16, 2018 Jun 16, 2018.
- 4. Robert P. Seifert, and Y Li. Lecture. Detecting and Phenotyping Circulating Immature T cells in the Bone Marrow of Non-T cell Acute Lymphoblastic Leukemia Patients. University of Florida College of Medicine, Dept. of Pathology, Immunology and Laboratory Medicine, 35th Annual Resident Research Day Symposium. Gainesville, FL. Jun 3, 2017 Jun 3, 2017.
- Robert P. Seifert, P McNab(f), W J Sexton, K K Sawczyn, P Smith, D Coppola, and M M Bui. Lecture. Rhabdomyomatous Differentiation in Wilms Tumor Pulmonary Metastases: A Case Report and Literature Review. University of South Florida Pathology Resident Research Day. Tampa, FL. May 24, 2013 - May 24, 2013.
- 6. **Robert P. Seifert**, <u>C Seubert</u>, and E Pinto<sub>(p)</sub>. *Poster*. Commercial Emulsion Causes Injection Pain: Why Clinical Approaches Work. College of Medicine Research Day, University of Florida College of Medicine. Gainesville, FL. Apr 22, 2008 Apr 22, 2008.
- 7. **Robert P. Seifert**, C Seubert, E Pinto<sub>(p)</sub>, and G Hochhaus. *Lecture*. Alleviation of Propofol Injection Pain: Why clinical approaches work. University Scholars Program, University of Florida, Undergraduate Research Symposium. Gainesville, FL. Mar 1, 2008 Mar 1, 2008.
- 8. **Robert P. Seifert**, C Seubert, E Pinto<sub>(p)</sub>, and G Hochhaus. *Poster*. Alleviation of Injection Aqueous Phase of Propofol Emulsion. College of Medicine Research Day, University of Florida College of Medicine. Gainesville, FL. Mar 20, 2007 Mar 20, 2007.

#### Other

Reynolds P, McCarrell T, Flax S, **Seifert R**, and Olsen G<sub>(r)</sub>. *Lecture*. Feasibility of ADAMTS13 as a Prognostic Marker for Equine Inflammatory and Coagulopathic Syndromes. University of Florida, College of Medicine, Dept. of Pathology, Immunology and Laboratory Medicine, CRC Grant Presentation. Pathology Infrastructure Series. Gainesville, FL. Apr 10, 2019 - Apr 10, 2019.

# **Ongoing Projects**

 Hematopathology diagnosis of disease with clinical decision support by using machine learning on flow cytometry data

**Summary**: Machine learning has demonstrated utility in anatomic pathology by way of image analysis on stained sections. Flow cytometric analysis for leukemia/lymphoma diagnosis relies on similar principles yet is composed of tabulated data, obviating the need for an image analysis intermediary. This may have utility as an adjunct to traditional diagnosis.

Role: Primary Investigator

 Examination of PD-1 and PDL-1 expression on tumor and lymphocyte subsets by clinical flow cytometry

**Summary:** PDL-1 expression on tumor cells and PD-1 expression on T cells can be assessed by clinical flow cytometric analysis. Unlike traditional immunohistochemical methods, flow cytometric analysis allows for definitive identification of T cell subsets expressing PD-1 and may correlate better with targeted therapy response than immunohistochemistry.

Role: Primary Investigator

• Studies of thymidylate synthase as a tumor-promoting oncogene for development of new allosteric inhibitors for cancer treatment

**Summary:** Overexpression of thymidylate synthase (TS) is observed in a wide range of human cancers where it is associated with advanced disease and resistance to commercially available TS inhibitors. The objectives of this proposal are: i) to determine how TS overexpression promotes tumorigenicity in hTS/Ink4a/Arf-/-mice. We hypothesize that TS overexpression drives DNA replication stress by deregulating replication factors and nucleotide pool ratios that result in double strands break and genomic instability in the absence of INK4a/ARF checkpoints. ii) to develop new potent TS allosteric inhibitor analogues.

Role: Co-Investigator, PI: Zajac-Kaye, Ph.D.

NIH R01 CA

Anatomical structures and cell type mapping table development
 Summary: Anatomical Structures and Cell Types (ASCT) tables (see examples at https://tinyurl.com/ASCT10x10) aim to capture the nested part of structure inherent to human body parts--from the whole body to the single cell level. For each cell type, we capture major assays used to identify cell types, e.g., marker genes,

antibodies, stains.

Role: Co-Investigator, PI: Clive Wasserfall, PhD

# **Basic Science Research Experience**

Alleviation of Propofol Injection Pain: 2005 - 2009

Why clinical approaches work.

Role: Designed and executed project involving low molecular weight dialysis membranes, Nuclear Magnetic Resonance spectroscopy, HPLC, and dispersion analysis of clinically relevant anesthetic admixtures in order to better understand pharmaceutical lipid chemistry.

Preceptor: Christoph N. Seubert, M.D., Ph. D., Department of Anesthesiology, University of Florida College of Medicine

# **Work Experience**

Research and development intern 2008

Axogen, Inc. Alachua, Florida

Intern: Analyzed literature on hand surgery and nerve-sparing prostatectomy in order to help establish control data for the clinical trials of Axogen's Avance peripheral nerve allograph.

Supervisor: Erik DeVinney

#### **Hobbies and Other Interests**

University of Florida Football
Walt Disney World
Board game design and development:

Talon 1000 ©GMT Games, LLC	2018
Lead Developer	
Space Empires 4x: Replicators ©GMT	2018
Games, LLC 2018, Lead Playtester	
Talon ©GMT Games, LLC 2015, Lead Developer	2015
Space Empires 4x: Close Encounters ©GMT	2012
Games, LLC 2012, Lead Playtester	
Space Empires 4x ©GMT Games,	2011
LLC 2011, <b>Playtester</b>	