WILLIAM SENAPEDIS

Newton, MA ▪ (781) 350-0868
william.senapedis@gmail.com ▪ linkedin.com/in/william-senapedis

SUMMARY

Seasoned researcher highly experienced in the fields of cell biology and oncology. Served as both program lead and individual contributor to dedicated teams that successfully submitted several Investigational New Drug (IND) applications for both small molecules and mRNA therapeutics as well as a New Drug Application (NDA) to treat patients with relapsed/refractory multiple myeloma (R/R MM) which garnered FDA-accelerated approval (XPOVIO® / selinexor). Seeking an opportunity to discover novel targets and translational biomarkers to move pipelines forward and improve patient selection and care.

WORK EXPERIENCE

BIOTARGETED SOLUTIONS LLC, Biotechnology Consultant, Newton MA 2025-present

Founder and Principal Consultant

- Provide expert consulting in translational medicine, biomarker strategy, and drug development for biotech and pharmaceutical companies.
- Advise clients on biomarker discovery, validation, and integration in clinical trials to support precision medicine initiatives.
- Guide clients through regulatory strategy including IND, NDA, and BLA submissions, ensuring alignment with FDA and EMA requirements.
- Support early-stage biotech startups with scientific strategy, team mentorship, and investor communications.
- Develop scientific and medical communications including manuscripts, white papers, and regulatory documentation.
- Offer strategic advisory services to optimize drug development pipelines, leveraging 20+ years of research expertise.
- Engage in high-impact collaborations with leading biotech firms, research institutions, and venture capital groups.

OMEGA THERAPEUTICS INC., Oncology Discovery, Cambridge MA 2020 – 2025

Senior Director, Cancer Biology (2023 – 2025), **Director, Cancer Biology** (2020 – 2023)

- Established, recruited, managed and mentored the oncology discovery team including scientists and research associates.
- Led several oncology target programs using novel mRNA Epigenomic Therapeutics delivered via lipid nanoparticles, including Omega's first clinical candidate, OTX-2002, for the treatment of patients with MYC-associated advanced solid tumors (focused on hepatocellular carcinoma), which successfully completed the escalation phase (24 patients total) of a global Phase 1/2 clinical trial (November 2024).
  - Planned and executed robust mechanism of action and non-clinical pharmacology studies targeting oncogenic MYC using internal resources and Contract Research Organizations (CROs) to support and compose INTERACT (December 2020) and pre-IND (May 2021) Briefing Books that led to the submission of an IND application (June 2022) and initiation of Phase 1/2 clinical trial.
  - Wrote, reviewed and updated modules for IND application and contributed to Information Requests (IR), the clinical protocol, annual updates to Investigational Brochure (IB) and Development Safety Update Report (DSUR) as well as biomarker reports for the final Clinical Study Report (CSR).
- Developed the translational research program for OTX-2002 global clinical trial with applications across the Omega platform.
  - Developed novel epigenetic pharmacodynamic (PD) target engagement biomarkers both internally and in collaboration with CROs.
  - Determined time points and pharmacokinetic (PK) / PD samples to collect from patients for retrospective biomarker analysis.
  - Selected vendors for clinical sample management/logistics and bioanalysis through consensus building across departments.
- Prepared and presented non-clinical and clinical data on OTX-2002 at major conferences (e.g., AACR, ASCO, and ESMO GI).
- Published a research article based on non-clinical OTX-2002 data in *Nature Communications* as first author (September 2024).

RESTORBIO, INC., Research Group, Boston MA 2019 – 2020

Senior Director, Research

- Initiated drug discovery programs for treating advanced age-related diseases including osteoarthritis, sarcopenia, and neurodegeneration (e.g., Parkinson's disease).
- Established novel target pipeline programs through CROs.

KARYOPHARM THERAPEUTICS INC., Biology Department, Newton MA 2011 – 2020

Clinical Research Scientist Consultant (2020), **Director, Research and Clinical Development** (2017 – 2019),
Associate Director, Biology (2016 – 2017), **Senior Scientist, Biology** (2012 – 2015), **Scientist, Biology** (2011)

- Managed/mentored groups of scientists and made individual contributions to novel oncology and non-oncology research projects.
- Co-led programs that discovered the second-generation Selective Inhibitor of Nuclear Export (SINE) compound KPT-8602 / eltanexor and the novel oral dual inhibitor of PAK4 and NAMPT, KPT-9274 / ATG-019 / padnarsertib.

- Co-led clinical candidate selection, IND applications, and initiation of Phase I clinical trials for eltanexor and padnarsertib.
- Contributed to clinical protocols and amendments, IBs, and DSURs.
- Prepared material for and trained clinical personnel during Site Initiation Visits.
- Determined time points and type of samples to collect from patients for prospective and retrospective biomarker determination.

- Managed the Phase I clinical trial data including daily tracking of efficacy and safety to support and understand the translational research of SINE compounds and padnarsertib.
- Shared translational data and maintained site engagement through weekly investigator meetings.
- Initiated and contributed to the padnarsertib clinical trials in companion dogs with spontaneous solid and hematological malignancies.
- Supported drug discovery efforts and established non-clinical mechanism of action research for the first-in-class SINE compound KPT-330 / selinexor / XPOVIO®.
- Prepared, wrote, and reviewed non-clinical pharmacology reports and summary documents for IND applications, IBs, and the NDAs for XPOVIO® (FDA-approved to treat relapsed/refractory multiple myeloma [R/R MM] on July 3, 2019, R/R diffuse large B-cell lymphoma on June 22, 2020, and R/R MM in combination with bortezomib and dexamethasone on December 18, 2020).
- Prepared and presented non-clinical and preliminary clinical data at internal Scientific Advisor Board meetings and major conferences (e.g., AACR, ASH, ESMO, ASCO GI, and others).

FOX CHASE CANCER CENTER, Department of Medical Oncology, Philadelphia PA. Sci. Tech. Mentoring with Dr. Elizabeth Henske

EDUCATION

Doctor of Philosophy, Cell Biology, Harvard Medical School, Boston, MA
Bachelor of Science, *with Distinction*, Biology, Minor in Chemistry, Pennsylvania State University, University Park, PA

HARVARD MEDICAL SCHOOL, Boston, MA

Ph.D. Candidate Mentoring with Dr. Pamela Silver, Department of Systems Biology

- Executed a high-throughput RNA interference (RNAi) screen to determine how a set of genes, when reduced, influence Akt signaling and FOXO1a localization.
- Dissertation: *Forkhead at the Crossroads of Cancer and Healthy Lifespan*.

Rotating Ph.D. Candidate, **Biological and Biomedical Sciences Program**

- Worked with Dr. Alex Toker at Beth Israel Deaconess Medical Center, Boston MA and Dr. Robert Kingston at Massachusetts General Hospital, Boston MA

MENTORING EXPERIENCE

OMEGA THERAPEUTICS INC.

- Led a multi-disciplinary cancer discovery project team (2-5 researchers) for Omega's first IND.
- Managed/mentored research associates and scientists within the oncology group transitioning from discovery to translational team through projects, individual goal development and three successful promotions.
- Established external collaborations with CROs for analysis of non-clinical and clinical samples.

KARYOPHARM THERAPEUTICS INC.

- Managed a multi-disciplinary team (2-5 researchers) as the head of biology in matrix model environment.
- Supervised technicians and post-doctoral level scientists within the biology group, supporting multiple clinical programs through projects and individual goal development.
- Set up and maintained over 50 academic and biotechnology external collaborations and CROs.

HARVARD MEDICAL SCHOOL

- Mentored undergraduate and Master's-level research scientists in the Silver laboratory.
- Taught BCMP/MCB 234: Cellular Metabolism and Human Disease.
- Served as teaching fellow for the 2007 Harvard iGEM (International Genetically Engineered Machine) team.

ADDENDUM

ORAL PRESENTATIONS

- In silico-designed covalent peptidomimetic inhibitors (KPT-SINE) of CRM1 modulate tumor suppressor protein nuclear export and induce apoptosis in cancer cells. AACR Chemical Systems Biology, June 28, 2012; Boston, Massachusetts, USA
- KPT-SINE (Selective Inhibitors of Nuclear Export) induce apoptosis in colon cancer cells in vitro and in vivo through nuclear localization of Tumor Suppressor Proteins (TSPs). AACR Annual Meeting, April 2, 2012; Chicago, Illinois, USA
- A nuclear localization switchable device reveals a regulatory network. Conference on Systems Biology in Mammalian Cells, June 3rd, 2010; Freiburg, Germany

PUBLICATIONS

- **Senapedis W**, Gallagher KM, Figueroa E, Farelli JD, Lyng R, Hodgson JG, O'Donnell CW, Newman JV, Pacaro M, Siecinski SK, Chen J, McCauley TG. "Targeted transcriptional downregulation of MYC using epigenomic controllers demonstrates antitumor activity in hepatocellular carcinoma models." Nat Commun. 16 Sept. 2024, Vol 15, Article number: 7875.
- Khan HY, Nagasaka M, Aboukameel A, Alkhalili O, Uddin MH, Bannoura S, Mzannar Y, Azar I, Beal EW, Tobon M, Kim SH, Beydoun R, Baloglu E, **Senapedis W**, El-Rayes BF, Philip PA, Mohammad RM, Shields AF, Al Hallak MN, Azmi AS. "Anticancer efficacy of KRASG12C inhibitors is potentiated by PAK4 inhibitor KPT9274 in preclinical models of KRASG12C mutant pancreatic and lung cancers." Mol Cancer Ther. 2023 Sep 13. Online ahead of print.
- Khan HY, Uddin MH, Balasubramanian SK, Sulaiman N, Iqbal M, Chaker M, Aboukameel A, Li Y, **Senapedis W**, Baloglu E, Mohammad RM, Zonder J, Azmi AS. "PAK4 and NAMPT as Novel Therapeutic Targets in Diffuse Large B-Cell Lymphoma, Follicular Lymphoma, and Mantle Cell Lymphoma." Cancers (Basel). 2021 Dec 29;14(1):160
- Cornell RF, Baz R, Richter JR, Rossi A, Vogl DT, Chen C, Shustik C, Alvarez MJ, Shen Y, Unger TJ, Ben-Shahar O, Wang H, Baloglu E, **Senapedis W**, Ma X, Landesman Y, Bai X, Bader J, Xu H, Marshall T, Chang H, Walker CJ, Shah J, Shacham S, Kauffman MG, Hofmeister CC. "A phase 1 clinical trial of oral eltanexor in patients with relapsed or refractory multiple myeloma." Am J Hematol. 2022 Feb 1;97(2):E54-E58.
- Mpilla GB, Uddin MH, Al-Hallak MN, Aboukameel A, Li Y, Kim SH, Beydoun R, Dyson G, Baloglu E, **Senapedis WT**, Landesman Y, Wagner KU, Viola NT, El-Rayes BF, Philip PA, Mohammad RM, Azmi AS. "PAK4-NAMPT Dual Inhibition Sensitizes Pancreatic Neuroendocrine Tumors to Everolimus." Mol Cancer Ther. 2021 Oct;20(10):1836-1845.
- Trott JF, Aboud OA, McLaughlin B, Anderson KL, Modiano JF, Kim K, Jen KY, **Senapedis W**, Chang H, Landesman Y, Baloglu E, Pili R, Weiss RH. "Anti-Cancer Activity of PAK4/NAMPT Inhibitor and Programmed Cell Death Protein-1 Antibody in Kidney Cancer." Kidney360. 2020 May 28;1(5):376-388
- Fischer MA, Friedlander SY, Arrate MP, Chang H, Gorska AE, Fuller LD, Ramsey HE, Kashyap T, Argueta C, Debler S, Byrne M, Villaume MT, Shaver AC, **Senapedis W**, Landesman Y, Baloglu E, Shacham S, Savona MR. "Venetoclax response is enhanced by selective inhibitor of nuclear export compounds in hematologic malignancies." Blood Adv. 2020;4(3):586–598.
- Abril-Rodriguez G, Torrejon DY, Liu W, Zaretsky JM, Nowicki TS, Tsoi J, Puig-Saus C, Baselga-Carretero I, Medina E, Quist MJ, Garcia AJ, **Senapedis W**, Baloglu E, Kalbasi A, Cheung-Lau G, Berent-Maoz B, Comin-Anduix B, Hu-Lieskovan S, Wang C-Y, S Grasso CS, Ribas A. "PAK4 inhibition improves PD-1 blockade immunotherapy." Nat Cancer 2020 (1), 46–58.
- Mpilla G, Aboukameel A, Muqbil I, Kim S, Beydoun R, Philip PA, Mohammad RM, Kamgar M, Shidham V, **Senapedis W**, Baloglu W, Li J, Dyson G, Xue Y, El-Rayes B, Azmi AS. "PAK4-NAMPT Dual Inhibition as a Novel Strategy for Therapy Resistant Pancreatic Neuroendocrine Tumors" Cancers. Nov 2019, 11(12), 1902
- Sexton R, Mahdi Z, Chaudhury R, Beydoun R, Aboukameel A, Khan HY, Baloglu E, **Senapedis W**, Landesman Y, Tesfaye A, Kim S, Philip PA, Azmi AS. "Targeting Nuclear Exporter Protein XPO1/CRM1 in Gastric Cancer." Int J Mol Sci. 2019 Sep 28;20(19). pii: E4826.
- Mitchell SR, Larkin K, Grieselhuber NR, Lai TH, Cannon M, Orwick S, Sharma P, Asemelash Y, Zhang P, Goettl VM, Beaver L, Mims A, Puduvalli VK, Blachly JS, Lehman A, Harrington B, Henderson S, Breitbach JT, Williams KE, Dong S, Baloglu E, **Senapedis W**, Kirschner K, Sampath D, Lapalombella R, Byrd JC. "Selective targeting of NAMPT by KPT-9274 in acute myeloid leukemia." Blood Adv. 2019 Feb 12;3(3):242-255.
- Aboukameel A, Muqbil I, Baloglu E, **Senapedis W**, Landesman Y, Argueta C, Kauffman M, Chang H, Kashyap T, Shacham S, Neggers JE, Daelemans D, Heath EI, Azmi AS. "Down-regulation of AR splice variants through XPO1 suppression contributes to the inhibition of prostate cancer progression." Oncotarget. 2018 Oct 19;9(82):35327-35342
- Li N, Lopez MA, Linares M, Kumar S, Oliva S, Martinez-Lopez J, Xu L, Xu Y, Perini T, **Senapedis W**, Baloglu E, Shammas MA, Hunter ZR, Anderson KC, Treon SP, Munshi NC, Fulciniti M. "Dual PAK4-NAMPT inhibition impacts growth and survival, and increases sensitivity to DNA-damaging agents in Waldenstrom Macroglobulinemia." Clin Cancer Res. 2018 Sep 11.

- Kashyap T, Argueta C, Unger T, Klebanov B, Debler S, **Senapedis W**, Crochiere ML, Lee MS, Kauffman M, Shacham S, Landesman Y. "Selinexor reduces the expression of DNA damage repair proteins and sensitizes cancer cells to DNA damaging agents." Oncotarget. 2018 Jul 20;9(56):30773-30786.
- Argueta C, Kashyap T, Klebanov B, Unger TJ, Guo C, Harrington S, Baloglu E, Lee M, **Senapedis W**, Shacham S, Landesman Y. "Selinexor synergizes with dexamethasone to repress mTORC1 signaling and induce multiple myeloma cell death." Oncotarget. 2018 May 22;9(39):25529-25544.
- Gandhi UH, **Senapedis W**, Baloglu E, Unger TJ, Chari A, Vogl D, Cornell RF. "Clinical Implications of Targeting XPO1-mediated Nuclear Export in Multiple Myeloma." Clin Lymphoma Myeloma Leuk. 2018 May;18(5):335-345.
- Neggers JE, Kwanten B, Dierckx T, Noguchi H, Voet A, Bral L, Minner K, Massant B, Kint N, Delforge M, Vercruysse T, Baloglu E, **Senapedis W**, Jacquemyn M and Daelemans D. "Target identification of small molecules using large-scale CRISPR-Cas mutagenesis scanning of essential genes." Nat Commun. 2018 Feb 5;9(1):502.
- Azmi AS, Li Y, Muqbil I1, Aboukameel A, **Senapedis W**, Baloglu E, Landesman Y, Shacham S, Kauffman MG, Philip PA, and Mohammad RM. "Exportin 1 (XPO1) inhibition leads to restoration of tumor suppressor miR-145 and consequent suppression of pancreatic cancer cell proliferation and migration." Oncotarget. 2017 Jul 17;8(47):82144-82155
- Rane CK, Patel M, Cai L, **Senapedis W**, Baloglu E, Minden A. "Decrypting the PAK4 transcriptome profile in mammary tumor forming cells using Next Generation Sequencing." Genomics. 2017 Oct 18. pii: S0888-7543(17)30128-3
- Takao S, Chien W, Madan V, Lin DC, Ding LW, Sun QY, Mayakonda A, Sudo M, Xu L, Chen Y, Jiang YY, Gery S, Lill M, Park E, **Senapedis W**, Baloglu E, Müschen M, Koeffler HP. "Targeting the vulnerability to NAD+ depletion in B-cell acute lymphoblastic leukemia." Leukemia. 2018 Mar;32(3):616-625. doi: 10.1038/leu.2017.281. Epub 2017 Sep 14.
- Mohammad RM, Li Y, Muqbil I, Aboukameel A, **Senapedis W**, Baloglu E, Landesman Y, Philip PA, Azmi AS. "Targeting Rho GTPase effector p21 activated kinase 4 (PAK4) suppresses p-Bad-microRNA drug resistance axis leading to inhibition of pancreatic ductal adenocarcinoma proliferation." Small GTPases. 2017 Jun 22:0. doi: 10.1080/21541248.2017.1329694. [Epub ahead of print]
- Hwang VJ, Zhou X, Chen X, Trott J, Abu Aboud O, Shim K, Dionne LK, Chmiel KJ, **Senapedis W**, Baloglu E, Mahjoub MR, Li X, Weiss RH. "Anticystogenic activity of a small molecule PAK4 inhibitor may be a novel treatment for autosomal dominant polycystic kidney disease." Kidney Int. 2017 Oct; 92(4):922-933. doi: 10.1016/j.kint.2017.03.031. Epub 2017 May 23.
- Rane C, **Senapedis W**, Baloglu E, Landesman Y, Crochiere M, Das-Gupta S, Minden A. "A novel orally bioavailable compound KPT-9274 inhibits PAK4, and blocks triple negative breast cancer tumor growth." Sci Rep. 2017 Feb 15;7: 42555. doi: 10.1038/srep42555.
- Fulciniti M, Martinez-Lopez J, **Senapedis W**, Oliva S, Bandi RL, Amodio N, Xu Y, Szalat RL, Gulla A, Samur MK, Roccaro A, Linares M, Cea M, Baloglu E, Argueta C, Landesman Y, Shacham S, Liu S, Schenone M, Wu SL, Karger B, Prabhala R, Anderson KC, Munshi NC. "Functional role and therapeutic targeting of p21-associated kinase 4 (PAK4) in multiple myeloma." Blood. 2017 Jan 17. pii: blood-2016-06-724831. doi: 10.1182/blood-2016-06-724831.
- Aboukameel A, Muqbil I, **Senapedis W**, Baloglu E, Landesman Y, Shacham S, Kauffman M, Philip PA, Mohammad RM, Azmi AS. "Novel p21-Activated Kinase 4 (PAK4) Allosteric Modulators Overcome Drug Resistance and Stemness in Pancreatic Ductal Adenocarcinoma." Mol Cancer Ther. 2017 Jan;16(1):76-87. doi: 10.1158/1535-7163.MCT-16-0205.
- Vercruysse T, De Bie J, Neggers J, Jacquemyn M, Vanstreels E, Schmid-Burgk JL, Hornung V, Baloglu E, Landesman Y, **Senapedis W**, Shacham S, Dagklis A, Cools J, Daelemans D. "The second-generation exportin-1 inhibitor KPT-8602 demonstrates potent activity against acute lymphoblastic leukemia." Clin Cancer Res. 2016 Oct 25. pii: clincanres.1580.2016.
- Muqbil I, Aboukameel A, Elloul S, Carlson R, **Senapedis W**, Baloglu E, Kauffman M, Shacham S, Bhutani D, Zonder J, Azmi AS, Mohammad RM. "Anti-tumor activity of selective inhibitor of nuclear export (SINE) compounds, is enhanced in non-Hodgkin lymphoma through combination with mTOR inhibitor and dexamethasone." Cancer Lett. 2016 Dec 28;383(2):309-317. doi: 10.1016/j.canlet.2016.09.016.
- Kashyap T, Argueta C, Aboukameel A, Unger TJ, Klebanov B, Mohammad RM, Muqbil I, Azmi AS, Drolen C, **Senapedis W**, Lee M, Kauffman M, Shacham S, Landesman Y. "Selinexor, a Selective Inhibitor of Nuclear Export (SINE) compound, acts through NF-κB deactivation and combines with proteasome inhibitors to synergistically induce tumor cell death." Oncotarget. 2016 Nov 29;7(48):78883-78895. doi: 10.18632/oncotarget.12428.
- Kim J, McMillan E, Kim HS, Venkateswaran N, Makkar G, Rodriguez-Canales J, Villalobos P, Neggers JE, Mendiratta S, Wei S, Landesman Y, **Senapedis W**, Baloglu E, Chow CB, Frink RE, Gao B, Roth M, Minna JD, Daelemans D, Wistuba II, Posner BA, Scaglioni PP, White MA. "XPO1-dependent nuclear export is a druggable vulnerability in KRAS-mutant lung cancer." Nature. 2016 Oct 6;538(7623):114-117. doi: 10.1038/nature19771.

- Abu Aboud O, Chen CH, **Senapedis W**, Baloglu E, Argueta C, Weiss RH. "Dual and Specific Inhibition of NAMPT and PAK4 by KPT-9274 Decreases Kidney Cancer Growth." Mol Cancer Ther. 2016 Sep;15(9):2119-29. doi: 10.1158/1535-7163.MCT-16-0197. Epub 2016 Jul 7.
- Etchin J, Berezovskaya A, Conway AS, Galinsky IA, Stone RM, Baloglu E, **Senapedis W**, Landesman Y, Kauffman M, Shacham S, Wang JCY, Look AT. "KPT-8602, second-generation inhibitor of XPO1-mediated nuclear export, is well tolerated and highly active against AML blasts and leukemia-initiating cells." Leukemia. 2017 Jan;31(1):143-150. doi: 10.1038/leu.2016.145.
- Crochiere M, **Senapedis W**, Kashyap T, McCauley D, Kauffman M, Shacham S, and Landesman Y. "The selective inhibitor of nuclear export compound, selinexor, inhibits NF-κB and induces anti-non-small cell lung cancer activity regardless of p53 status." Int J Cancer Res Mol Mech. 2016 April 29. doi: 10.16966/2381-3318.126
- Jiang YY, Lin DC, Mayakonda A, Hazawa M, Ding LW, Chien WW, Xu L, Chen Y, Xiao JF, **Senapedis W**, Baloglu E, Kanojia D, Shang L, Xu X, Yang H, Tyner JW, Ming-Rong Wang MR and Koeffler HP. "Targeting Super-Enhancer associated oncogenes in esophageal squamous cell carcinoma." Gut. 2017 Aug;66(8):1358-1368. doi: 10.1136/gutjnl-2016-311818. Epub 2016 May 10.
- Taylor-Kashton C, Lichtensztejn D, Baloglu E, **Senapedis W**, Shacham S, Kauffman MG, Kotb R, Mai S. "XPO1 Inhibition Preferentially Disrupts the 3D Nuclear Organization of Telomeres in Tumor Cells." J Cell Physiol. 2016 Dec; 231(12):2711-9. doi: 10.1002/jcp.25378. Epub 2016 Apr 8.
- Ferreiro-Neira I, Torres NE, Liesenfeld LF, Chan CH, Penson T, Landesman Y, **Senapedis W**, Shacham S, Hong TS, Cusack JC. "XPO1 Inhibition Enhances Radiation Response in Preclinical Models of Rectal Cancer." Clin Cancer Res. 2016 Apr 1;22(7):1663-73. doi: 10.1158/1078-0432.CCR-15-0978.
- Crochiere M, Kashyap T, Kalid O, Shechter S, Klebanov B, **Senapedis W**, Saint-Martin JR, Landesman Y. "Deciphering mechanisms of drug sensitivity and resistance to Selective Inhibitor of Nuclear Export (SINE) compounds." BMC Cancer. 2015 Nov 17;15:910. doi: 10.1186/s12885-015-1790-z.
- Azmi AS, Muqbil I, Wu J, Aboukameel A, **Senapedis W**, Baloglu E, Bollig-Fischer A, Dyson G, Kauffman M, Landesman Y, Shacham S, Philip PA, Mohammad RM. "Targeting the Nuclear Export Protein XPO1/CRM1 Reverses Epithelial to Mesenchymal Transition." Sci Rep. 2015 Nov 5;5:16077. doi: 10.1038/srep16077.
- **Senapedis W**, Crochiere M, Baloglu E, Landesman Y. "Therapeutic Potential of Targeting PAK Signaling." Anticancer Agents Med Chem. 2015 Jun 17. [Epub ahead of print]
- Gravina GL*, **Senapedis W***, McCauley D, Baloglu E, Shacham S, Festuccia C. "Nucleo-cytoplasmic transport as a therapeutic target of cancer." J Hematol Oncol. 2014 Dec 5; 7:85. *Authors contributed equally to this work
- Yang J, Bill MA, Young GS, La Perle K, Landesman Y, Shacham S, Kauffman M, **Senapedis W**, Kashyap T, Saint-Martin JR, Kendra K, Lesinski GB. "Novel small molecule XPO1/CRM1 inhibitors induce nuclear accumulation of TP53, phosphorylated MAPK and apoptosis in human melanoma cells." PLoS One. 2014 Jul 24; 9(7):e102983. eCollection 2014.
- **Senapedis WT**, Baloglu E, Landesman Y. "Clinical translation of nuclear export inhibitors in cancer." Semin Cancer Biol. 2014 Aug; 27:74-86. Epub 2014 Apr 19
- Salas Fragomeni RA, Chung HW, Landesman Y, **Senapedis W**, Saint-Martin JR, Tsao H, Flaherty KT, Shacham S, Kauffman M, Cusack JC. "CRM1 and BRAF inhibition synergize and induce tumor regression in BRAF mutant melanoma." Mol Cancer Ther. 2013 Jul;12(7):1171-9. Epub 2013 Apr 24.
- Tai YT, Landesman Y, Acharya C, Calle Y, Zhong MY, Cea M, Tannenbaum D, Cagnetta A, Reagan M, Munshi AA, **Senapedis W**, Saint-Martin JR, Kashyap T, Shacham S, Kauffman M, Gu Y, Wu L, Ghobrial I, Zhan F, Kung AL, Schey SA, Richardson P, Munshi NC, Anderson KC. "CRM1 inhibition induces tumor cell cytotoxicity and impairs osteoclastogenesis in multiple myeloma: molecular mechanisms and therapeutic implications." Leukemia. 2014 Jan;28(1):155-65. Epub 2013 Apr 16.
- **Senapedis WT**, Kennedy CJ, Boyle PM, Silver PA. "Whole genome siRNA cell-based screen links mitochondria to Akt signaling network through uncoupling of electron transport chain." Mol Biol Cell. 2011 May 15; 22(10):1791-1805. Epub 2011 Apr 1.
- Aldaye FA, **Senapedis WT**, Silver PA, Way JC. "A Structurally Tunable DNA-Based Extracellular Matrix." J Am Chem Soc. 2010 Oct 27; 132(42):14727-9.
- Gómez-Baldó L, Schmidt S, Maxwell CA, Bonifaci N, Gabaldón T, Vidalain PO, **Senapedis W**, Kletke A, Rosing M, Barnekow A, Rottapel R, Capellá G, Vidal M, Astrinidis A, Piekorz RP, Pujana MA. "TACC3-TSC2 maintains nuclear envelope structure and controls cell division." Cell Cycle. 2010 Mar 18; 9(6):1143-1155.
- Astrinidis A*, **Senapedis W***, Henske EP, Hamartin, the tuberous sclerosis complex 1 gene product, interacts with polo-like kinase 1 in a phosphorylation-dependent manner. Hum Mol Genet. 2006 Jan 15; 15(2):287-97. *Authors contributed equally to this work

- Astrinidis A*, **Senapedis W***, Coleman TR, Henske EP., "Cell cycle-regulated phosphorylation of hamartin, the product of the tuberous sclerosis complex 1 gene, by cyclin-dependent kinase 1/cyclin B.", J Biol Chem. 2003 Dec 19; 278(51):51372-9. *Authors contributed equally to this work
- Khare L, Astrinidis A, **Senapedis W**, Adams PD, Henske EP., "Expression of wild type and mutant TSC2, but not TSC1, causes an increase in the G1 fraction of the cell cycle in HEK293 cells.", J Med Genet. 2002 Sept; 39(9):676-80.

PATENTS

- Combination therapies comprising myc modulators and checkpoint inhibitors. Witt, AE; Farelli, JD; Scheidegger, AW; **Senapedis, W**; Kennedy, JM; Belaghzal, H; Yarar, D; Lee, E; Palakurthi, SS. (2023), WO2024040229A3.
- Formulations for modulating myc expression. Witt, AW; Farelli, JD; Scheidegger, AW; **Senapedis, W**; Kennedy, JM; Belaghzal, H; Ansell, SM; Du, X; Lin, PJC; Tam, YK. (2023), WO2023250427A3.
- Combination therapies comprising myc modulation. Witt, AE; Farelli, JD; Scheidegger, AW; **Senapedis, W**; Kennedy, JM; Belaghzal, H; Yarar, D; Lee, E; Gallagher, K. (2023), WO2023250429A2.
- Compositions and methods for modulation myc expression. Witt, A; Farelli, J; Scheidegger, A; **Senapedis, W**; Kennedy, J; Belaghzal, H; Yarar, D; Lee, E.. (2021) WO2022132195A2.
- Preparationof(S,E)-3-(6-aminopyridin-3-yl)-N-((5-(4-(3-fluoro-3-methylpyrrolidine-1-carbonyl)phenyl)-7-(4-fluorophenyl) benzofuran -2-yl)methyl)acrylamide for the treatment of cancer. Baloglu, E; Shacham, S; **Senapedis, W**. From PCT Int. Appl. (2017), WO 2017031323 A1 20170223.
- 3-(Pyridin-3-yl) acrylamide and N-(pyridin-3-yl) acrylamide derivatives as PAK and NAMPT modulators and their preparation. Baloglu, E; Shacham, S; **Senapedis, W**. From PCT Int. Appl. (2017), WO 2017031213 A1 20170223.
- Preparation of 2-pyridylcyclopropane-1-carboxamide derivatives and their use as kinase inhibitors. Baloglu, E; Shacham, S; **Senapedis, W**. From PCT Int. Appl. (2017), WO 2017031204 A1 20170223.
- Preparation of benzothienylmethyl and benzothiazolylmethyl acrylamides for treating diseases. Baloglu, E; **Senapedis, W**; Shacham, S From PCT Int. Appl. (2016), WO 2016100515 A1 20160623.
- Multicyclic compounds as PAK inhibitors and their preparation. Baloglu, E; Shacham, S; **Senapedis, W**; McCauley, D; Landesman, Y; Golan, G; Kalid, O; Shechter, S. From PCT Int. Appl. (2015), WO 2015042414 A1 20150326.
- Substituted benzofuranyl and benzoxazolyl compounds as PAK modulators and their preparation. Baloglu, E; Shacham, S; **Senapedis, W**; McCauley, D; Landesman, Y; Golan, G; Kalid, O; Shechter, S. From PCT Int. Appl. (2015), WO 2015003166 A1 20150108.
- Triazole derivatives as nuclear transport modulators and their preparation and use for the treatment of CRM1-associated diseases. Baloglu, E; Shacham, S; McCauley, D; Kashyap, T; **Senapedis, W**; Landesman, Y; Golan, G; Kalid, O; Shechter, S. From PCT Int. Appl. (2014), WO 2014205389 A1 20141224.
- Preparation of phenyltriazolylpropanoic acid derivatives as nuclear transport modulators. Baloglu, E; Shacham, S; McCauley, D; Kashyap, T; **Senapedis, W**; Landesman, Y; Golan, G; Kalid, O; Shechter, S. From PCT Int. Appl. (2014), WO 2014205393 A1 20141224.
- Substituted 2,3-dihydrobenzofuranyl compounds as cytotoxic agents and their preparation. Baloglu, E; Shechter, S; Shacham, S; McCauley, D; **Senapedis, W**; Golan, G; Kalid, O. From PCT Int. Appl. (2014), WO 2014085607 A1 20140605.
- Preparation of substituted azole derivatives as nuclear transport modulators and their use thereof. Sandanayaka, VP.; Shacham, S; Kauffman, M; Shechter, S; McCauley, D; Landesman, Y; **Senapedis, W**; Saint-Martin, JR. From PCT Int. Appl. (2013), WO 2013019561 A1 20130207.