BIOGRAPHICAL SKETCH

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NAME: Posadas, Edwin Melencio

eRA COMMONS USER NAME (credential, e.g., agency login): EPOSADAS

POSITION TITLE: Director, Translational Oncology Program

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Johns Hopkins University, Baltimore, MD	BS	05/1993	Chemical Engineering
Johns Hopkins University, Baltimore, MD	BS	05/1993	Biomedical Engineering
Johns Hopkins University School of Medicine, Baltimore, MD	MD	05/1998	
University of Michigan, Ann Arbor, MI	Resident	06/2001	Internal Medicine
National Cancer Institute, Bethesda, MD	Fellow	05/2005	Medical Oncology/Hematology Fellowship

A. Personal Statement

I am a physician-scientist with the expertise, leadership, training, resources necessary to successfully carry out translational clinical studies involving investigators from across the translational spectrum. I am a board-certified medical oncologist specializing in the clinical care of men with advanced prostate cancers in the academic environments of Cedars-Sinai Medical Center and the University of California, Los Angeles. At Cedars-Sinai, I am the Director of the Translational Oncology Program and the Medical Director of the Urologic Oncology Program at the Samuel Oschin Comprehensive Cancer Institute (SOCCI) and the Clinical Chief of the Division of Hematology Oncology of the Department of Medicine. As such, I have the ability to recruit patients from across the spectrum of disease for research studies. Moreover, I have the position and resources to execute the translational clinical studies. As an example, I have been collaborating with Dr. Tseng since my arrival at Cedars-Sinai in 2011. As his technology and my practice have grown, we have developed a highly interactive and synergistic collaboration consolidated with shared personnel and funding that has been academically productive as evidenced by our grants and scholarly manuscripts and abstracts presented at both national and international fora.

1. Jiang R, Lu YT, Ho H, Li B, Chen JF, Lin M, Li F, Wu K, Wu H, Lichterman J, Wan H, Lu CL, OuYang W, Ni M, Wang L, Li G, Lee T, Zhang X, Yang J, Rettig M, Chung LW, Yang H, Li KC, Hou Y, Tseng HR, Hou S, Xu X, Wang J, Posadas EM. A comparison of isolated circulating tumor cells and tissue biopsies using whole-genome sequencing in prostate cancer. Oncotarget. 2015 Dec 29;6(42):44781-93. PubMed PMID: 26575023; PubMed Central PMCID: PMC4792591.
2. Chen JF, Ho H, Lichterman J, Lu YT, Zhang Y, Garcia MA, Chen SF, Liang AJ, Hodara E, Zhau HE, Hou S, Ahmed RS, Luthringer DJ, Huang J, Li KC, Chung LW, Ke Z, Tseng HR, Posadas EM. Subclassification of prostate cancer circulating tumor cells by nuclear size reveals very small nuclear circulating tumor cells in patients with visceral metastases. Cancer. 2015 Sep 15;121(18):3240-51. PubMed PMID: 25975562; PubMed Central PMCID: PMC4560974.
3. Lu YT, Zhao L, Shen Q, Garcia MA, Wu D, Hou S, Song M, Xu X, Ouyang WH, Ouyang WW, Lichterman J, Luo Z, Xuan X, Huang J, Chung LW, Rettig M, Tseng HR, Shao C, Posadas EM. NanoVelcro Chip for CTC enumeration in prostate cancer patients. Methods. 2013 Dec 1;64(2):144-52. PubMed PMID: 23816790; PubMed Central PMCID: PMC3834112.
4. Zhao L, Lu YT, Li F, Wu K, Hou S, Yu J, Shen Q, Wu D, Song M, OuYang WH, Luo Z, Lee T, Fang X, Shao C, Xu X, Garcia MA, Chung LW, Rettig M, Tseng HR, Posadas EM. High-purity prostate circulating tumor cell isolation by a polymer nanofiber-embedded microchip for whole exome sequencing. Adv Mater. 2013 Jun 4;25(21):2897-902. PubMed PMID: 23529932; PubMed Central PMCID: PMC3875622.

B. Positions and Honors

Positions and Employment

2005 - 2007	Instructor, Department of Surgery, University of Chicago, Chicago, IL
2005 - 2007	Instructor, Department of Medicine, University of Chicago, Chicago, IL
2007 - 2011	Assistant Professor, Department of Medicine, University of Chicago, Chicago, IL
2007 - 2011	Assistant Professor, Department of Surgery, University of Chicago, Chicago, IL
2011 -	Medical Director, Urologic Oncology Program, Cedars-Sinai Medical Center, Los Angeles, CA
2011 - 2014	Assistant Professor, Department of Medicine, Cedars-Sinai Medical Center, Los Angeles, CA
2011 - 2014	Clinical Assistant Professor, University of California, Los Angeles, Los Angeles, CA
2014 -	Associate Professor, Department of Medicine, Cedars-Sinai Medical Center, Los Angeles, CA
2014 -	Clinical Associate Professor, Department of Medicine, UCLA, Los Angeles, CA
2014 -	Clinical Chief, Div of Heme-Onc, Dept of Medicine, Cedars-Sinai MC, Los Angeles, CA
2016 -	Director, Translational Oncology Program, Samuel Oschin Comprehensive Cancer Institute, Los Angeles, CA

Other Experience and Professional Memberships

1993 -	Member, American Medical Association
1998 -	Member, Association of Philippine Physicians of America
2001 -	Member, American Society of Clinical Oncology
2001 -	Member, American Association for Cancer Research
2004 -	Reviewer, US Dept. of Defense: CDMRP/PCRP
2005 -	Affiliate Member, American Urologic Association
2005 -	Member, Society of Basic Urologic Research
2006 - 2010	Inpatient Flow Director, University of Chicago
2008 -	Member, American College of Physician
2008 - 2008	Mentor, University of Chicago- Summer Student Research Program
2008 - 2010	Cancer Education Committee, American Society of Clinical Oncology
2009 -	Editorial Board, European Journal of Clinical and Medical Oncology
2009 - 2011	Member, University of Chicago- Clinical Trials Review Committee
2010 -	Editorial Board, Anticancer Agents in Medicinal Chemistry
2011 -	Core Member, Cedars-Sinai Medical Center- SOCCI Urologic Oncology Program
2011 -	Member, Cedars-Sinai Medical Center- Cancer Committee
2011 -	Member, Cedars Sinai Medical Center- Protocol Review and Monitoring Committee
2011 -	Member, Cedars-Sinai Medical Center- Cancer Quality Committee
2011 - 2011	Member, Cedars Sinai Medical Center- Medical Staff Leadership Program
2012 -	Editorial Board, World Journal of Clinical Case Conferences
2012 -	Member, Prostate Cancer Foundation Young Investigators' Retreat Planning Committee
2012 -	Physician Engagement Team Member, American Cancer Society- South Los Angeles Chapter
2013 -	Member, American Cancer Society, Community Leadership Council- South & Central LA
2016 -	Member, White House Cancer Moonshot Program- Blood Profiling Atlas in Cancer
2016 -	Member, Society of Catholic Scientists
2016 -	Fellow, Cedars-Sinai Fellowship Program

Honors

1991	Research Fellowship, National Science Foundation
1992	Induction, Golden Key National Honors Society
1992	Induction, Tau Beta Pi National Engineering Honors Society
1992	Paul A.C. Cook Award, Johns Hopkins University Department of Chemical Engineering
1992	Biomedical Engineering Award, Johns Hopkins University Department of Biomedical Engineering
1992	Summer Research Scholarship, American Chemical Society Polymer Division
2003	Travel Grant Award Recipient, American Society of Clinical Oncology
2004	Scholar-in-Training Award, American Association for Cancer Research

2004 Participant- Methods in Clinical Oncology Workshop , AACR
2010 Fellow, American College of Physicians

C. Contribution to Science

1. FYN and metastasis. The focus of my basic research has been in the understanding of the biological mechanisms underlying the process of metastasis in prostate cancer. My laboratory identified Fyn, a member of the Src-family, to be particularly dysregulated in prostate cancer. Our work has shown that the role of Fyn is predominately in directed cellular motility/chemotaxis and we have been actively working on identifying the signaling partner of Fyn that may be useful as clinical therapeutic targets (such as the Met kinase). This interested in metastasis has led us to the area of circulating tumor cell biology as a means of looking at the pool of cells which are most likely to be in the process of metastatic dissemination and hence colonization. More recently, we have shown that Fyn is related to the development of atypical prostate cancers with neuroendrine features relating it now to our clinical interest in visceral metastases in prostate cancer.
   a. Gururajan M, Cavassani KA, Sievert M, Duan P, Lichterman J, Huang JM, Smith B, You S, Nandana S, Chu GC, Mink S, Josson S, Liu C, Morello M, Jones LW, Kim J, Freeman MR, Bhowmick N, Zhau HE, Chung LW, Posadas EM. SRC family kinase FYN promotes the neuroendocrine phenotype and visceral metastasis in advanced prostate cancer. Oncotarget. 2015 Dec 29;6(42):44072-83. PubMed PMID: 26624980; PubMed Central PMCID: PMC4792542.
   b. Jensen AR, David SY, Liao C, Dai J, Keller ET, Al-Ahmadie H, Dakin-Haché K, Usatyuk P, Sievert MF, Paner GP, Yala S, Cervantes GM, Natarajan V, Salgia R, Posadas EM. Fyn is downstream of the HGF/MET signaling axis and affects cellular shape and tropism in PC3 cells. Clin Cancer Res. 2011 May 15;17(10):3112-22. PubMed PMID: 21364031; PubMed Central PMCID: PMC3118405.
   c. Saito YD, Jensen AR, Salgia R, Posadas EM. Fyn: a novel molecular target in cancer. Cancer. 2010 Apr 1;116(7):1629-37. PubMed PMID: 20151426; PubMed Central PMCID: PMC2847065.
   d. Posadas EM, Al-Ahmadie H, Robinson VL, Jagadeeswaran R, Otto K, Kasza KE, Tretiakov M, Siddiqui J, Pienta KJ, Stadler WM, Rinker-Schaeffer C, Salgia R. FYN is overexpressed in human prostate cancer. BJU Int. 2009 Jan;103(2):171-7. PubMed PMID: 18990162; PubMed Central PMCID: PMC2741693.
2. Clinical trials expertise: prostate cancer and kinase inhibitors. A large part of my body of work has been in the area of testing novel therapeutics in prostate cancer with an emphasis on kinase inhibitors that focus on targets including Fyn, Met, VEGFR. These studies have given me ample opportunity to build a familiarity with the subtleties of treating advanced prostate cancers and a deep understanding of the issues facing clinicians who care for men with this disease.
   a. Posadas EM, Ahmed RS, Karrison T, Szmulewitz RZ, O'Donnell PH, Wade JL 3rd, Shen J, Gururajan M, Sievert M, Stadler WM. Saracatinib as a metastasis inhibitor in metastatic castration-resistant prostate cancer: A University of Chicago Phase 2 Consortium and DOD/PCF Prostate Cancer Clinical Trials Consortium Study. Prostate. 2016 Feb 15;76(3):286-93. PubMed PMID: 26493492; PubMed Central PMCID: PMC4904773.
   b. Antonarakis ES, Heath EI, Posadas EM, Yu EY, Harrison MR, Bruce JY, Cho SY, Wilding GE, Fetterly GJ, Hangauer DG, Kwan MF, Dyster LM, Carducci MA. A phase 2 study of KX2-391, an oral inhibitor of Src kinase and tubulin polymerization, in men with bone-metastatic castration-resistant prostate cancer. Cancer Chemother Pharmacol. 2013 Apr;71(4):883-92. PubMed PMID: 23314737; PubMed Central PMCID: PMC3609871.
   c. Ward JE, Karrison T, Chatta G, Hussain M, Shevrin D, Szmulewitz RZ, O'Donnell PH, Stadler WM, Posadas EM. A randomized, phase II study of pazopanib in castrate-sensitive prostate cancer: a University of Chicago Phase II Consortium/Department of Defense Prostate Cancer Clinical Trials Consortium study. Prostate Cancer Prostatic Dis. 2012 Mar;15(1):87-92. PubMed PMID: 22006050; PubMed Central PMCID: PMC4312616.
   d. Araujo JC, Mathew P, Armstrong AJ, Braud EL, Posadas E, Lonberg M, Gallick GE, Trudel GC, Paliwal P, Agrawal S, Logothetis CJ. Dasatinib combined with docetaxel for castration-resistant prostate cancer: results from a phase 1-2 study. Cancer. 2012 Jan 1;118(1):63-71. PubMed PMID: 21976132; PubMed Central PMCID: PMC3898168.
3. Clinical trials expertise in genitourinary oncology. My body of work shows extensive experience in clinical trials with an emphasis in genitourinary oncology.
   a. Hahn NM, Knudsen BS, Daneshmand S, Koch MO, Bihrle R, Foster RS, Gardner TA, Cheng L, Liu Z, Breen T, Fleming MT, Lance R, Corless CL, Alva AS, Shen SS, Huang F, Gertych A, Gallick GE,

Mallick J, Ryan C, Galsky MD, Lerner SP, Posadas EM, Sonpavde G. Neoadjuvant dasatinib for muscle-invasive bladder cancer with tissue analysis of biologic activity. Urol Oncol. 2016 Jan;34(1):4.e11-7. PubMed PMID: 26362343.

b. Tannir NM, Wong YN, Kollmannsberger CK, Ernstoff MS, Perry DJ, Appleman LJ, Posadas EM, Cho D, Choueiri TK, Coates A, Gupta N, Pradhan R, Qian J, Chen J, Scappaticci FA, Ricker JL, Carlson DM, Michaelson MD. Phase 2 trial of linifanib (ABT-869) in patients with advanced renal cell cancer after sunitinib failure. Eur J Cancer. 2011 Dec;47(18):2706-14. PubMed PMID: 22078932; PubMed Central PMCID: PMC4167844.

c. Yu EY, Massard C, Gross ME, Carducci MA, Culine S, Hudes G, Posadas EM, Sternberg CN, Wilding G, Trudel GC, Paliwal P, Fizazi K. Once-daily dasatinib: expansion of phase II study evaluating safety and efficacy of dasatinib in patients with metastatic castration-resistant prostate cancer. Urology. 2011 May;77(5):1166-71. PubMed PMID: 21539969; PubMed Central PMCID: PMC3394099.

d. Chung EK, Posadas EM, Kasza K, Karrison T, Manchen E, Hahn OM, Stadler WM. A phase II trial of gemcitabine, capecitabine, and bevacizumab in metastatic renal carcinoma. Am J Clin Oncol. 2011 Apr;34(2):150-4. PubMed PMID: 20395787; PubMed Central PMCID: PMC4644601.

4. My efforts in prostate cancer grew from a concerted effort at developing translational clinical trials in a number of other malignancies with novel agents. These studies including translational studies in ovarian cancer and kidney cancer. These studies speak to the breadth of my experience in translational oncology research prior to focusing my laboratory and clinical efforts on prostate cancer.

a. Bylow KA, Atkins MB, Posadas EM, Stadler WM, McDermott DF. Phase II trial of carboplatin and paclitaxel in papillary renal cell carcinoma. Clin Genitourin Cancer. 2009 Jan;7(1):39-42. PubMed PMID: 19213667.

b. Azad NS, Posadas EM, Kwitkowski VE, Steinberg SM, Jain L, Annunziata CM, Minasian L, Sarosy G, Kotz HL, Premkumar A, Cao L, McNally D, Chow C, Chen HX, Wright JJ, Figg WD, Kohn EC. Combination targeted therapy with sorafenib and bevacizumab results in enhanced toxicity and antitumor activity. J Clin Oncol. 2008 Aug 1;26(22):3709-14. PubMed PMID: 18669456.

c. Posadas EM, Kwitkowski V, Kotz HL, Espina V, Minasian L, Tchabo N, Premkumar A, Hussain MM, Chang R, Steinberg SM, Kohn EC. A prospective analysis of imatinib-induced c-KIT modulation in ovarian cancer: a phase II clinical study with proteomic profiling. Cancer. 2007 Jul 15;110(2):309-17. PubMed PMID: 17559139.

d. Posadas EM, Liel MS, Kwitkowski V, Minasian L, Godwin AK, Hussain MM, Espina V, Wood BJ, Steinberg SM, Kohn EC. A phase II and pharmacodynamic study of gefitinib in patients with refractory or recurrent epithelial ovarian cancer. Cancer. 2007 Apr 1;109(7):1323-30. PubMed PMID: 17330838; PubMed Central PMCID: PMC2778218.

5. My laboratory research record also shows a strong interest in the incorporation of emerging technologies for the detection, diagnosis, and understanding of clinical prostate cancers. These efforts include studies with novel imaging agents (e.g. organic dyes with specific cancer uptake), large oncosomes- a new biological entity which exist in parallel with CTCs and tumors, and non-coding RNAs.

a. Josson S, Gururajan M, Sung SY, Hu P, Shao C, Zhau HE, Liu C, Lichterman J, Duan P, Li Q, Rogatko A, Posadas EM, Haga CL, Chung LW. Stromal fibroblast-derived miR-409 promotes epithelial-to-mesenchymal transition and prostate tumorigenesis. Oncogene. 2015 May 21;34(21):2690-9. PubMed PMID: 25065597.

b. Gururajan M, Josson S, Chu GC, Lu CL, Lu YT, Haga CL, Zhau HE, Liu C, Lichterman J, Duan P, Posadas EM, Chung LW. miR-154* and miR-379 in the DLK1-DIO3 microRNA mega-cluster regulate epithelial to mesenchymal transition and bone metastasis of prostate cancer. Clin Cancer Res. 2014 Dec 15;20(24):6559-69. PubMed PMID: 25324143; PubMed Central PMCID: PMC4710473.

c. Josson S, Gururajan M, Hu P, Shao C, Chu GY, Zhau HE, Liu C, Lao K, Lu CL, Lu YT, Lichterman J, Nandana S, Li Q, Rogatko A, Berel D, Posadas EM, Fazli L, Sareen D, Chung LW. miR-409-3p/-5p promotes tumorigenesis, epithelial-to-mesenchymal transition, and bone metastasis of human prostate cancer. Clin Cancer Res. 2014 Sep 1;20(17):4636-46. PubMed PMID: 24963047; PubMed Central PMCID: PMC4155061.

d. Morello M, Minciacchi VR, de Candia P, Yang J, Posadas E, Kim H, Griffiths D, Bhowmick N, Chung LW, Gandellini P, Freeman MR, Demichelis F, Di Vizio D. Large oncosomes mediate intercellular transfer of functional microRNA. Cell Cycle. 2013 Nov 15;12(22):3526-36. PubMed PMID: 24091630; PubMed Central PMCID: PMC3906338.

Complete List of Published Work in My Bibliography:
http://bit.ly/2jU87QT

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

5P01CA098912, NIH/NCI Chung, Leland (PI) 03/15/15-02/29/20
Prostate cancer bone metastasis: biology and targeting
Our long-term redefined goal is to pursue new concepts in the tumor microenvironment that redirect tumor cells toward a metastatic phenotype. We will pursue the underlying biology of how circulating tumor cells (CTCs) and disseminated tumor cells (DTCs) (Project 1), are recruited to participate in the metastatic cascade. We propose to develop biomarkers to predict which patients will switch from indolent to aggressive disease.
Role: Co-Investigator

U01 CA198900 , NIH/NCI Tseng and Posadas (PI) 09/01/15-08/31/20
Thermoresponsive NanoVelcro CTC Purification System for Prostate Cancer Profiling
The goal of this UO1 proposal is to develop Thermoresponsive (TR)-NanoVelcro CTC purification system that can be digitally programmed to achieve optimal performance for recovering viable CTCs in prostate cancer (PC) patients' blood. The purified CTCs will be subjected to various downstream functional and molecular assays, resulting in molecular signatures that can significantly contribute to understanding PC progression, implementation of personalized treatment, and development of new therapeutics.
Role: CPI

Completed Research Support

n/a, Spielberg Family Foundation Knudsen, Beatrice (PI) 10/01/13-10/01/15
The ecosystem of lethal prostate cancer
The goal of these studies is to identify blood borne markers of aggressive versus indolent prostate cancers.
Role: Co-Investigator

n/a, Margaret Early Family Trust Chung, Leland (PI) 07/01/14-07/31/15
Untangling mitochondrial MAOA and nuclear AR communication for the management of lethal castration-resistant prostate cancer metastasis
The goal of this study is to investigate the clinical applicability of MAO inhibition as a means for treating CRPC.
Role: Co-Investigator

W81XWH-11-1-0422 , DoD PCRP Posadas, Edwin Melencio (PI) 05/11/11-05/14/15
Fyn: a key regulator of metastasis in prostate cancer
The goal of these studies is to identify novel SNPs and mutations in Fyn correlating this to clinical behavior while characterizing the impact of these genetic alterations in biological function using in vitro and in vivo studies.
Role: PI

Challenge Award, Prost Ca Fnd Febbo, Philip (PI) 09/09/11-11/30/13
Understanding the clinical and radiological impact of XL-184 through treatment science
The goal of this study is to perform a comprehensive biological assessment of the effect of XL184 in metastatic, castrate-resistant prostate cancer using imaging, bone marrow biopsy, serum ELISA, and archival tissue analysis.
Role: Co-Investigator

Challenge Award, Prostate Ca Fnd Chung, Leland (PI) 04/01/08-10/31/13
Targeting cell death programs in the tumor
The goals of these studies are to study the role of microenvironmental signaling in prostate cancer with an emphasis on biospecimen analysis and preclinical studies with available signal transduction inhibitors to develop novel therapeutic approaches to prostate cancer
Role: Co-Investigator

PC073540, DoD PCPR Posadas, Edwin Melencio (PI) 04/01/08-02/29/12
Targeting FYN in prostate cancer
The goal of this study was to verify that Fyn is relevant to prostate cancer progression through a series of tissue correlative studies and initial in vitro and in vivo laboratory studies.
Role: PI

n/a, Prostate Cancer Foundation Posadas, Edwin Melencio (PI) 07/01/14-07/01/10
FYN is a key regulator of metastasis in prostate cancer