

CURRICULUM VITAE



A. Personal Information:

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B. Education:

University University of California, Irvine, Irvine, CA, Medicine, M.D.,
1993-1997
University of California, Irvine, Irvine, CA, Biological
Sciences, B.S., 1989-1992

Postgraduate Training Fellow, Division of Hematology and Oncology, Scripps Clinic,
La Jolla, CA, 2000-2003
Resident, Internal Medicine, University of California, San
Diego, San Diego, CA, 1998-2000
Internship, Internal Medicine, University of California, San
Diego, San Diego, CA, 1997-1998

Honors Excellence in Research, University of California, Irvine, 1992
American Association of Pathology Chairs Honor Society, 1995
Irving M. Reingold Prize in Pathology, 1995
Walter Blumenson Scholarship for Academic Promise, 1997
Department of Medicine Award, University of California,
Irvine, 1997
Alpha Omega Alpha Medical Honors Society, 1997
Waltz Award for Leadership, Scripps Clinic, La Jolla, 2003
Skaggs Scholar in Clinical Science, 2003
Outstanding Teacher Award, Scripps Clinic, La Jolla, 2004
National Cancer Institute Gold Certificate of Excellence, 2011
ASCO Award for Excellence in Clinical Trials, 2012
USC Medical Oncology Faculty Award for Excellence in
Teaching, 2015, 2018

C. Professional Background:

Academic Appointments

Hematologist/Oncologist, The Scripps Clinic, La Jolla, CA, 2003-2007
Assistant Professor, Department of Molecular and Experimental Medicine, The Scripps Research Institute, La Jolla, CA, 2003-2007
Hematologist/Oncologist, The Billings Clinic, Billings, MT, 2007-2014
Adjunct Professor of Cell Biology, The Scripps Research Institute, La Jolla, CA, 2012-2015
Associate Professor of Clinical Medicine, University of Southern California, Los Angeles, CA, 2014-present

Administrative Appointments

Assistant Director, Translational Research, Scripps Cancer Center, La Jolla, CA, 2003-2004
Director, Andrew J. and Erna F. Viterbi, Department of Translational Research Scripps Cancer Center, La Jolla CA, 2004-2007
Department Chairman, Hematology/Oncology, Billings Clinic, Billings, MT, 2010-2014
Section Head, Solid Tumors, USC/Norris Cancer Center

Teaching

University of Southern California

Lecturer, Postgraduate IM Resident Medical Oncology Lectures, 4 Units, Lung & Head/Neck Cancer, 2014-
Lecturer, Fellow's Lecture Series, 4 Units, Lung & Head/Neck Cancer, 2014-
Lecturer, Introduction to Clinical Medicine, 12 Units, Cancer Screening, 2014-

Rocky Mountain College

Lecturer, Hematology Oncology, 2 Units, Leukemia, 2008-2010

CME Courses Developed – Western Student and Resident Medical Research Forum

Executive Co-Director, Western Regional Meetings, 16 Units, 2014-

Training Record

Medical Residents

Sonia Lin, 2014-2016, Disparities in Care of NSCLC
Gino In, 2014-2016, Patterns of Metastasis in NSCLC
Alexander Martin, 2017-2018, Objective Metrics of Patient Performance in Cancer
Arnab Basu 2018-2019, KRAS in lung cancer
Jonathan Chang 2018-2019, Research Biopsies in Cancer Clinical Trials
Elizabeth Pan 2018-2019, Validity of Cancer Models in Lung Cancer
Christina Vu 2018-2019, CT Screening of Asian Populations for NSCLC
Amanda Herrmann 2018-2019, Genomics of Resistance in EGFR/ALK NSCLC
Justin Tiulim 2020, sEphB4 in SCCHN
Robert Hsu 2020, KRAS in lung cancer

Graduate Students

Dena Marrinucci, 2004-2008, Circulating Tumor Cells in Cancer
Jeremy Mason, 2012-2016, Markov Modeling of Cancer
Paymaneh Malihi, 2015-2019, Predicting outcomes in Prostate Cancer
Zaki Hasnain, 2014-2018, Movement Trackers in Evaluation of Cancer Patients
Lisa Welter, 2016-2019, Evolution in Breast Cancer
Xiayu Jiao, 2017-2019, Pharmaco-economics in lung cancer
Joseph Larson 2018-2020, Progression of Breast Cancer in Pseudotime
Tanachat Nilanon 2018-2019, Wearable Trackers in Cancer Patients
Rishvanth Prabacker 2019, Short Read Sequencing on Long Read Sequencers
Michael Schmidt 2020, Development of single cell assays for tissue of origin

D. Society Memberships:

National

American Society of Clinical Oncology, 2003-present
American Society of Hematology, 2004-2012
American Association for Cancer Research, 2005-2007, 2015-present

E. Service:

Department

Thoracic Oncology Program Development, Hoag Cancer Center, 2015
Medical Oncology Graduate Medical Education Evaluations Committee, GME, 2015-2016

Medical School

Resident Research Advisor, Scripps Clinic Graduate Medical Education, LA Jolla, CA, 2003-2007
Clinical Competency Committee, USC Medical Oncology, 2015-2018

Hospital or Medical Group

Cancer Conference Committee Chair, Billings Clinic, Billings, MT, 2007-2014
Program Leader, Thoracic Oncology, Billings Clinic, Billings, MT, 2007-2014
Program Leader, Head and Neck Oncology, Billings Clinic, Billings, MT, 2009-2014
Member, Cancer Committee, Norris Cancer Center, Los Angeles, CA, 2016
Oncology Strategic Planning Steering Committee, Norris Cancer Hospital, Los Angeles, CA, 2016
Thoracic Oncology Program Co-Leader 2017-Present

University

Disease-Site Head, Thoracic and Head & Neck Malignancies, Translational and Clinical Sciences Program, USC/Norris Cancer Center, 2018-
Reviewer, Clinical Investigations Committee, USC Norris Comprehensive Cancer Center, Los Angeles, CA, 2014-present
Leadership Committee, USC Norris Comprehensive Cancer Center, Los Angeles, CA, 2016-2017
Chairman, Data and Safety Monitoring Committee, USC Norris Comprehensive Cancer Center, Los Angeles, CA, 2017-present
Task Force Member for Equity and Diversity, Keck School of Medicine, Department of Medicine 2019
Internal Advisory Board, USC-FAMU-UF Cancer Health Equity Center 2019-Present

Professional

Project Team Member, Ixazomib & Pevonedistat, Clinical Trials Network, CTEP, NCI 2017
Project Team Member, CO-1686 Team, Clinical Trials Network, CTEP, NCI, 2015
Contributor, Advanced Lung Cancer, Remedy Health Guide, 2017

Advisory Boards

Speaker's Bureau, Sanofi-Aventis Inc., 2005
Clinical Advisory Board, Anaborex Inc., 2005-2007
Speaker's Bureau, Cytogen Inc., 2006
Speaker's Bureau, Amgen, 2008-2011
Speaker's Bureau, Lilly, 2009-2011
Speaker's Bureau, Boehringer-Ingelheim, 2013-2014
Scientific Advisory Board, Indee Inc. 2016
Clinical Advisory Board, Western Oncolytics, 2018
Scientific Advisory Board, Kyoku Inc 2019

Scientific Advisory Board, Quantgene Inc. 2019

Editorial Boards

Editor, *Convergent Science Physical Oncology*, IOP Publishing, 2014-2017
Associate Editor, *Frontiers in Oncology*, 2019-20

Journal Reviews

Convergent Science Physical Oncology, 2014-2017
Nature: Scientific Reports, 2016
Journal of the National Cancer Institute, 2016
BMC Cancer, 2018
Scientific Reports (Springer) 2020-2021
Clinical Cancer Informatics 2020

Grant Reviews

Reviewer, Proteomic Technology Assessment Resources, National Cancer Institute, 2006
Reviewer, Early Detection Research Network, National Cancer Institute, 2010
Reviewer, National Centers for Biomedical Computing, 2010
Reviewer NCI IMAT Innovative and Applied Emerging Technologies in Biospecimen Science, National Cancer Institute, 2012-2014
Reviewer, VA ONCO B Merit Awards, National Cancer Institute, 2014-2015
Reviewer, Exploratory and Developmental Studies, National Cancer Institute 2017
Reviewer, Extramural Loan Repayment Program, National Center for Advancing Translation Sciences, 2017
Reviewer, NCI Omnibus Exploratory Grants Program R21/R03 2018-20
Reviewer, NIH Loan Repayment Program L30/L40 2019-20
Reviewer, AACR 2020

Consultantships

Consultant, Genoptix, Inc., 2005-2006
Consultant, Genomics Institute of the Novartis Research Foundation, 2005-2007
Consultant, Alexion Antibody Technologies, 2005-2007
Consultant, ZLB Behring, 2006
Consultant, Genentech, 2015
Consultant, Turnstone Biologics, 2016
Consultant, Jooster, Inc., 2016-2017
Consultant, Astra Zeneca, 2017, 2019-Present
Consultant, Genentech 2017
Consultant, Takeda 2018
Consultant, Fujirebio 2019

Community

- Webinar Speaker, Cancer Information and Support Network, Patient Advocates Education, 2015
- Conference Speaker, Community Health Conference, Indian Wells Country Club, Indian Wells, CA, 2015
- Conference Speaker, Hack for Health, University of Southern California, Los Angeles, CA 2017
- Event Chair, Your Next Step is the Cure, Addario Lung Cancer Foundation, San Dimas, CA 2018
- Radio Guest, Cancer Screening, Exitos 99.9, Caracas, Venezuela, 2019

Invited Lectures, Symposia, Keynote Addresses

- Keynote Speaker, Cancer Survivor's Day, Scripps Clinic, La Jolla, CA, 2006
- Symposium Speaker, Circulating Tumor Cells, Big Sky ONS, Billings, MT, 2007
- Symposium Speaker, Telemedicine in Oncology, EMTN Retreat, Billings, MT, 2008
- Symposium Speaker, New Oncology Drugs in Development, Big Sky ONS, Billings, MT, 2010
- Symposium Speaker, Clinical Relevance of the Fluid Biopsy, PSOC Annual Meeting, Washington, DC, 2011
- Conference Speaker, HD-CTC Assay: Real Time Fluid Biopsy of Solid Tumors, USC, Los Angeles, CA, 2011
- Symposium Speaker, Clinical Applications of Newton's Model of Metastasis, PSOC Annual Meeting, Washington, DC, 2013
- Symposium Speaker, Getting Access to Data- Lots of Data, BD2K Symposium, Washington, DC, 2014
- Symposium Speaker, Building the Oncology System of the Future, Cancer Center Business Summit, Washington, DC, 2014
- Symposium Speaker, Precision Objective Measures for Cancer, Remote Medicine, and Discovery, Washington, DC, 2017
- Conference Speaker, USC's IMSC Retreat. Digital Applications for Smart Health. Los Angeles 2017
- Conference Speaker, American Cancer Society Cancer Action Network Forum, Challenges in Clinical Trials, Los Angeles, 2017
- Invited Speaker, Los Angeles Otolaryngology Society, Immunotherapy for Head and Neck Cancer, Los Angeles 2018
- Invited Speaker, American Association of Cancer Research Annual Meeting, Opening Plenary Session, Physicist vs Physician, Atlanta, GA 2019
- Invited Speaker, Foundation for the National Institutes of Health Biomarkers Consortium, Cachexia Working Group Workshop, Toward Objective Measures of Performance Status, Bethesda, MD 2019
- Invited Speaker, Los Angeles Radiologic Society Annual Conference, Immunotherapy of Lung Cancer, Long Beach, CA 2019

Plenary Speaker, American Association of Cancer Research Annual Meeting, Digitizing the Patient, Atlanta 2019
Invited Speaker, Cachexia Deep Dive Meeting, FNIH, Objective Metrics of Human Performance, North Bethesda, Maryland, 2019
Invited Speaker, International Society for Biological and Environmental Repositories, Digital Tools that Complement Biobanks, Minneapolis, MN 2019
Invited Speaker, Fujirebio corporation, Biomarkers in Lung Cancer. Malvern, PA 2020

Invited Grand Rounds/CME Lectures Invited

Grand Rounds, Circulating Tumor Cells in Predicting Cancer Outcomes, Billings Clinic, Billings, MT, 2008
Grand Rounds, Personalized Therapy for Lung Cancer, Billings Clinic, Billings, MT, 2009
Grand Rounds, Lung Cancer Screening, Billings Clinic, Billings MT, 2011
Grand Rounds, Breast Cancer Update, Livingston Memorial Hospital, Livingston MT, 2011
Grand Rounds, Novel Immunotherapies for Cancer, Billings Clinic, Billings, MT, 2012
Grand Rounds, Systemic Therapy for NSCLC, Verdugo Hills Hospital, Glendale, CA, 2014
CME Lecture, Immunotherapy: USC's Multi-Disciplinary Thoracic Oncology Conference, Pasadena, 2015
CME Lecture, Fluid Biopsy: USC's MultiD Thoracic Oncology Conference, Pasadena, CA, 2016
CME Lecture, Genomic Testing for Lung Cancer, Who, What, Where, When and How: USC's MultiD Thoracic Oncology Conference, Pasadena, CA 2017
CME Lecture, Immunotherapy for Metastatic Lung Cancer, Global Lung Health Summit, Tuscon, AZ 2018
Grand Rounds Lecture, Immunotherapy for Metastatic Lung Cancer, Eisenhower Medical Center, Palm Desert, CA 2018
CME Lecture, Update on Genomic Testing in Lung Cancer, USC Multidisciplinary Lung Cancer Conference, Marina Del Rey, CA 2019
Grand Rounds, Immunotherapy in Non Small Cell Lung Cancer, Huntington Hospital, Pasadena, CA 2019
Grand Rounds, Immunotherapy in Metastatic Lung Cancer, Providence Holy Cross Hospital, Mission Hills, CA 2019
Grand Rounds, Digital Medicine, Keck Medicine of USC, Los Angeles, CA 2020

F. Research Activities:

Cancer Diagnostic and Prognostic Technologies
Mathematical Modeling of Cancer Progression
Clinical Trials in Lung Cancer and Head/Neck Cancer
Digital Tools for Objective Measurement of Performance Status

G. Research Grants:

Active

1. USC Norris Comprehensive Cancer Center (Core) Grant, P30 CA014089, NIH/NCI, Lerman (PI), Nieva (Chair, DSMC), 12/01/96-11/30/21
2. A Phase IIa Trial of sEphB4-HSA in Combination with Pembrolizumab in Patients with Non-Small Cell Lung and Head/Neck Cancer, #53085 IISP, Merck, Nieva (PI), 04/25/17-04/25/21
3. Ming Hseih Foundation, Establishing a Diagnosis of Lung Cancer through a Fluid Biopsy (PI-Kuhn) 2019-2020

Completed

1. Four-Dimensional Heterogeneity of Fluid Phase Biopsies in Cancer (4DB Center), U54 CA143906, NIH/NCI, Kuhn (PI), Nieva (Co-Investigator), 09/30/09-08/31/15
2. A Phase III Prospective Double Blind Placebo Controlled Randomized Study of Adjuvant MEDI4736 in Completely Resected Non-Small Cell Lung Cancer, #NCIC CTG BR.31, Clinipace, Inc., Nieva (PI), 08/04/15-12/31/20
3. A Phase 1b Multi-Arm Study of sEphB4-HSA in Combination with Different Chemotherapy Regimens in Patients with Advanced Solid Tumors, Whittier Foundation, El-Khoueiry (PI), Nieva (Co-Investigator) 04/01/15-03/31/16
4. Analytic Tools for the Objective Monitoring of Human Performance (ATOM-HP), FFP-012016-0001 (USA051), Noetic Corporation (NIH), Williams (PI), Nieva (PI, Subcontract), 09/30/15-09/29/17
5. Circulating Tumor Cells in Non-Small Cell Lung Cancer, R01 CA125653, NIH/NCI, Nieva (PI), 09/24/07-07/31/12
6. High Speed Reliable Detection of Cancer Cells in Blood, R01 CA111359, NIH/NCI, Bruce (PI), Nieva (Co-Investigator), 09/06/06-07/31/11
7. Investigating the Link between the Atheronals and Aging, R21 AG028300, NIH/NIA, Wentworth (PI), Nieva (Co-Investigator), 08/15/06-06/30/08
8. Pharmacokinetic Effects of Aprepitant on Irinotecan, #26488 IISP, Merck, Nieva (PI), 2005-2007

H. Bibliography:

Peer Reviewed

1. Stuart MJ, Smith AM, **Nieva JJ**, Rock MG. Injuries in youth ice hockey: a pilot surveillance strategy. *Mayo Clin Proc* 70:350-356, 1995.

2. Wentworth P Jr, McDunn JE, Wentworth AD, Takeuchi C, **Nieva J**, Jones T, Bautista C, Ruedi JM, Gutierrez A, Janda KD, Babior BM, Eschenmoser A, Lerner RA. Evidence for antibody-catalyzed ozone formation in bacterial killing and inflammation. *Science* 298:2195-2199, 2002.
3. **Nieva J**, Del Zoppo G. Understanding coagulopathies. *Emerg Med* 35:35-44, 2003.
4. **Nieva J**, Bethel K, Saven A. Phase 2 study of rituximab in the treatment of cladribine-failed patients with hairy cell leukemia. *Blood* 102:810-813, 2003.
5. Wentworth P Jr, **Nieva J**, Takeuchi C, Galve R, Wentworth AD, Dilley RB, DeLaria GA, Saven A, Babior BM, Janda KD, Eschenmoser A, Lerner RA. Evidence for ozone formation in human atherosclerotic arteries. *Science* 302:1053-1056, 2003.
6. **Nieva J**, Saven A. Cladribine activity in systemic mast cell disease: application of biochemistry in the modern era of molecular biology. *Leuk Res* 28:113-114, 2004.
7. Zhang Q, Powers ET, **Nieva J**, Huff ME, Dendle MA, Bieschke J, Glabe CG, Eschenmoser A, Wentworth P Jr, Lerner RA, Kelly JW. Metabolite-initiated protein misfolding may trigger Alzheimer's disease. *Proc Natl Acad Sci USA* 101:4752-4757, 2004.
8. **Nieva J**, Wentworth P Jr. The antibody-catalyzed water oxidation pathway--a new chemical arm to immune defense? *Trends Biochem Sci* 29:274-278, 2004.
9. Mena-Duran AV, Togo SH, Bazhenova L, Cervera J, Bethel K, Senent ML, **Nieva J**, Sanz GF, Sanz MA, Saven A, Mustelin T. SHP1 expression in bone marrow biopsies of myelodysplastic syndrome patients: a new prognostic factor. *Br J Haematol* 129:791-794, 2005.
10. **Nieva J**, Kerwin L, Wentworth AD, Lerner RA, Wentworth P Jr. Immunoglobulins can utilize riboflavin (Vitamin B2) to activate the antibody-catalyzed water oxidation pathway. *Immunol Lett* 103:33-38, 2006.
11. Hsieh HB, Marrinucci D, Bethel K, Curry DN, Humphrey M, Krivacic RT, Kroener J, Kroener L, Ladanyi A, Lazarus N, Kuhn P, Bruce RH, **Nieva J**. High speed detection of circulating tumor cells. *Biosens Bioelectron* 21:1893-1899, 2006.
12. Bosco DA, Fowler DM, Zhang Q, **Nieva J**, Powers ET, Wentworth P Jr, Lerner RA, Kelly JW. Elevated levels of oxidized cholesterol metabolites in Lewy body disease brains accelerate alpha-synuclein fibrilization. *Nat Chem Biol* 2:249-253, 2006.

13. Takeuchi C, Galve R, **Nieva J**, Witter DP, Wentworth AD, Troseth RP, Lerner RA, Wentworth P Jr. Proatherogenic effects of the cholesterol ozonolysis products, atheronal-A and atheronal-B. *Biochemistry* 45:7162-7170, 2006.
14. Bussel JB, Kuter DJ, George JN, McMillan R, Aledort LM, Conklin GT, Lichtin AE, Lyons RM, **Nieva J**, Wasser JS, Wiznitzer I, Kelly R, Chen CF, Nichol JL. AMG 531, a thrombopoiesis-stimulating protein, for chronic ITP. *N Engl J Med* 355:1672-1681, 2006.
15. Nerenberg M, Kariv I, McNeeley P, Marchand P, Sur S, Diver J, Riccitelli S, **Nieva J**, Saven A. Use of optophoresis as an *in vitro* predictor of cell response to chemotherapy for chronic lymphocytic leukemia. *Leuk Lymphoma* 47:2194-2202, 2006.
16. Marrinucci D, Bethel K, Bruce RH, Curry DN, Hsieh B, Humphrey M, Krivacic RT, Kroener J, Kroener L, Ladanyi A, Lazarus NH, **Nieva J**, Kuhn P. Case study of the morphologic variation of circulating tumor cells. *Hum Pathol* 38:514-519, 2007.
17. **Nieva J**. The clinical significance of circulating tissue factor in prostate cancer. *Thromb Haemost* 97:329-330, 2007.
18. **Nieva J**, Saven A. Understanding hairy cell leukemia genetics. *Leuk Lymphoma* 48:653-654, 2007.
19. Tilley RE, Holscher T, Belani R, **Nieva J**, Mackman N. Tissue factor activity is increased in a combined platelet and microparticle sample from cancer patients. *Thromb Res* 122:604-609, 2008. PMID: PMC2572216
20. **Nieva J**. Genetics of hairy cell leukemia. *Oncol Rev* 1:189-194, 2008. PMID: N/A
21. **Nieva J**, Shafton A, Altobelli LJ 3rd, Tripuraneni S, Rogel JK, Wentworth AD, Lerner RA, Wentworth P Jr. Lipid-derived aldehydes accelerate light chain amyloid and amorphous aggregation. *Biochemistry* 47:7695-7705, 2008. PMID: N/A
22. Martin FM, Prchal J, **Nieva J**, Saven A, Andrey J, Bethel K, Barton JC, Aripally G, Bottomley SS, Friedman JS. Purification and characterization of sideroblasts from patients with acquired and hereditary sideroblastic anaemia. *Br J Haematol* 143:446-450, 2008. PMID: PMC2603068
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- into the oxidation of cholesterol *in vivo*. *Chem Commun (Camb)* 3098-3100, 2009. PMID: PMC2819220
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 30. **Nieva J**, Wendel M, Luttgen MS, Marrinucci D, Bazhenova L, Kolatkar A, Santala R, Whittenberger B, Burke J, Torrey M, Bethel K, Kuhn P. High-definition imaging of circulating tumor cells and associated cellular events in non-small cell lung cancer patients: a longitudinal analysis. *Phys Biol* 9:016004, 2012. PMID: PMC3388002
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- Fluid biopsy for circulating tumor cell identification in patients with early-and late-stage non-small cell lung cancer: a glimpse into lung cancer biology. *Phys Biol* 9:016005, 2012. PMID: PMC3387995
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 33. Newton PK, Mason J, Bethel K, Bazhenova LA, **Nieva J**, Kuhn P. A stochastic Markov chain model to describe lung cancer growth and metastasis. *PLoS One* 7:e34637, 2012. PMID: PMC3338733
 34. Jatoi A, **Nieva JJ**, Qin R, Loprinzi CL, Wos EJ, Novotny PJ, Moore DF Jr, Mowat RB, Bechar N, Pajon ER Jr, Hartmann LC. A pilot study of long-acting octreotide for symptomatic malignant ascites. *Oncology* 82:315-320, 2012. PMID: PMC3559024
 35. **Nieva JJ**, Kuhn P. Fluid biopsy for solid tumors: a patient's companion for lifelong characterization of their disease. *Future Oncol* 8:989-998, 2012. PMID: PMC3658625
 36. Newton PK, Mason J, Bethel K, Bazhenova L, **Nieva J**, Norton L, Kuhn P. Spreaders and sponges define metastasis in lung cancer: a Markov chain Monte Carlo mathematical model. *Cancer Res* 73:2760-2769, 2013. PMID: PMC3644026
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