

## Curriculum Vitae

Name: Richard A. Bender, M.D., F.A.C.P.

Present Address: 32392 Via Mentone, Dana Point, California 92629

Martial Status: Married, two children

### Education:

1966-B.A. (Biology)- University of California, Santa Barbara, California (with High Honors)

1970-M.D.- University of California, Los Angeles, California (Regents Scholar)

### Positions Held:

- 1970-1971 Intern in Medicine, Department of Medicine, Harbor General Hospital, Torrance, California
- 1971-1972 Resident in Medicine, Department of Medicine, Harbor General Hospital, Torrance, California
- 1972-1974 Clinical Associate, Medical Oncology and Hematology, National Cancer Institute, Bethesda, Maryland
- 1974-1978 Senior Investigator and Attending Physician, Medicine Branch, National Cancer Institute, Bethesda, Maryland
- 1979-1982 Assistant Member Two, Department of Biochemistry, Scripps Clinic and Research Foundation, LaJolla, California
- 1982-2000 Director of Medical Oncology and Hematology, Permanente Medical Group, San Diego, California
- 2000-2002 Senior Director/ Strategic Development Leader in Medical Oncology/Hematology, Johnson & Johnson Pharmaceutical R and D, Titusville, New Jersey
- 2002-2008 Medical Director-Hematology/ Oncology, Quest Diagnostics, Inc., San Juan Capistrano, California
- 2008-2011 Vice President and Chief Medical Officer, Agendia, B.V and Agendia, Inc., Amsterdam and Huntington Beach, California
- 2008-present Locum tenens physician in medical oncology/hematology for CompHealth, Weatherby Healthcare and StaffCare

- 2011- 2012 Senior Vice President, Medical Affairs, Caris Life Sciences, Irving TX  
(transitioning to consultant as of November 1, 2011)
- 2013-2015 Medical Affairs Consultant for Quest Diagnostics, Inc.
- 2015-2016 Chief Medical Officer, Signal Genetics, Carlsbad, CA
- 2015-present Consultant on Hematology and Pathology Devices Panel of the  
Medical Devices Advisory Committee, CDRH, FDA
- 2017-2019 Quest Diagnostics, Senior Medical Affairs Consultant in Medical  
Oncology/ Hematology
- 2019-present Staff Oncologist, The Oncology Institute of Hope / Innovation
- 2019-2022 Chief Medical Officer, Liquid Diagnostics, LLC
- 2022-present. Partner, Trusted Healthcare Advisors (Consulting)

Honorary Positions and Teaching Appointments:

- 1974-1978 Clinical Instructor in Medicine, Georgetown University School of  
Medicine, Washington, D.C.
- 1978-2000 Clinical Assistant Professor of Medicine, UCSD, San Diego California
- 1990-2000 Co-Investigator, Kaiser Permanente Community Clinical Oncology  
Program (CCOP)
- 1990-2008 Co-Editor, Anti-Cancer Drugs, An International Journal on Anti-  
Cancer Agents.
- 1995-2000 Executive Board, San Diego Hospice, California
- 1995-present Expert Reviewer in Medical Oncology-Medical Board of California
- 2002-2009 Clinical Instructor in Medicine, University of California,  
Irvine School of Medicine
- 2007-2013 Scientific Advisory Board, Aperio
- 2009-present Clinical Professor of Medicine (Adjunct), University of California, Los  
Angeles School of Medicine
- 2014-present Chairman, Clinical Advisory Board, Ceresti Health

Professional Societies:

American Association for Clinical Chemistry

American Society of Hematology  
American Society of Clinical Oncology  
American Association for Cancer Research

Certification:

Diplomate, Federal Licensing Examination Board, June, 1970  
Diplomate, American Board of Internal Medicine, June, 1973  
Diplomate, American Board of Internal Medicine – Medical Oncology,  
October, 1975  
Diplomate, American Board of Forensic Medicine  
Certificate of Qualification from New York State in Tumor Markers  
and Genomic Testing-valid through August, 2020

Honors and Awards:

Regents Scholar, State of California, 1966-1970  
Alpha Omega Alpha Medical Honor Society  
Medical Intern of the Year, June, 1971  
Fellow, American College of Physicians

Patents Pending or Granted:

1. Self-Organizing Maps in Clinical Diagnostics-USPA # 11/690745.
2. Nucleic Acid detection Combining Amplification with Fragmentation- USPA #  
Pending, Filed 4/30/2007

Licensed to Practice Medicine:

California

Relevant Experience:

1. Extensive laboratory experience in both basic science and in clinical pharmacology.
2. Management of 2<sup>nd</sup> largest Cancer center in California with 3500 new patient visits yearly and 250-300 chemotherapy administrations weekly. Employed 7 full time oncologists and necessary supporting staff. Developed and/ or executed 39 clinical trials for cooperative groups and for industry.

3. Preparation and conduct of Phase 1, 2 and 3 clinical trials for the NCI, for cooperative groups and for industry.
4. Development of Clinical Development Plans for New Agents under consideration.
5. Assessment of in-licensing opportunities and Due Diligence.
6. Review and Preparation of Regulatory Documents needed for NDA submission.
7. Responsibility for research and development of new diagnostic tests in hematology/ oncology for Quest Diagnostics including benchwork, in-licensing and platform development. Includes preparation of all necessary documentation for 50 state certification and medical oversight of regulatory submissions as may be required for 510k and PMA.
8. Chief Medical Officer for gene expression profiling company developing and marketing prognostic and predictive assays in breast cancer. Responsibilities included developing advocacy, adoption and reimbursement in the domestic marketplace. This has included developing relationships with key opinion leaders in breast cancer, initiating clinical trials to foster adoption and address important clinical questions, developing relations with key sanctioning bodies including the NCCN and ASCO, speaking at Advisory Boards cancer meetings, tumor boards and national meetings, developing relationships with national payor groups including face-to-face meetings and presentations and building an evidence dossier including a cost effectiveness and budget impact analysis. In addition, calling on key community physicians and institutions to develop local advocacy has been critical for adoption and reimbursement as well as the development and training of a Speaker's Bureau. Finally, assisting sales and marketing in developing a sales training manual and training sales representatives has been an important responsibility.
9. Significant experience with the FDA including Drs. Guttierrez, Hamburg, Becker, Woods and support staff regarding 510k clearances for MammaPrint and patient safety issues as pertain to IVDMA's under CLIA regulations.
10. Extensive experience in medical affairs including KOL development, professional relationships, development and execution of Advisory Boards, payor relationships, documentation including payor communications and clinical dossiers, clinical protocol development and execution, etc.

#### Selected Abstracts and Presentations:

1. Poster Presentation at American Society of Clinical Oncology meeting in Chicago, 2007 on "A Sensitive Method for Detection of EGFR Gene Mutations in Plasma" on June 3<sup>rd</sup> from 2-6 pm (#10041).
2. Publication of above abstract along with "Molecular Identification of Carcinoma of Unknown Primary (CUP) with Gene Expression Profiling", "Preliminary Study of Three

- Tumor Markers for Hepatocellular Carcinoma: AFP, AFP-L3 and Glypican-3”, “A Multiplex Assay for Detection of Common Pediatric Sarcoma Tumor Markers” and “Clinical Validation of a Self-Organizing Map (SOM) Based Quantitative Prediction Algorithm for Diagnosis of Cancer of Unknown Primary (CUP)” in the Proceedings of the American Society of Clinical Oncology, Volume 25, June 2007.
3. Presentation at American Association for Clinical Chemistry (AACC) meeting in St. Louis, MO on “Using Gene Expression Assays to Guide Therapy in Breast Cancer”, November , 2007.
  4. Abstracts presented at the 2008 meeting of the American Society of Clinical Oncology in Chicago, June 2008:
    - a. Li H, Sferruza AD, Qu KZ, Afdahl NH, Radcliff JS and Bender RA, Utility of four tumor markers alone and in combination for detection of Hepatocellular Carcinoma: AFP, AFP-L3, DCP and Cystatin C.
    - b. Li H, Qu KZ, Sferruza AD , Whitmire R and Bender RA, Human epididymis secretory protein in serum (HE4) as a marker of ovarian cancer.
  5. Presentations on “Gene Expression Profiling for Prognosis and Prediction in Early Stage Breast Cancer” at Tumor Boards at UCLA-Harbor General Hospital, Stanford University, Loma Linda Medical Center, NYU Medical Center and Portland Medical Center since January of 2009.
  6. Poster presentation at San Antonio Breast Cancer Symposium on Quest Diagnostics Intron 12 findings in Hispanics on December 12, 2014 – “Elevated frequency of a deleterious deep intron 12 BRCA2 splice variant in non-Caucasian Americans”, P4-05-06
- . Selected abstracts recently published:
1. Roepman P, Horlings H, Krijgsman O, Bueno-de-Mesquita J, Bender RA et. al. Microarray-based determination of ER, PR and HER2 receptor status: validation and comparison with IHC assessments. *Cancer Res* 69: 206-207s, 2009 (presented at the San Antonio Breast Cancer Symposium, Dec. 2008).
  2. Knauer M, Straver M , Rutgers E, Bender RA et. al. The 70-Gene MammaPrint Signature Is Predictive for Chemotherapy Benefit in Early Breast Cancer. *The Breast* 18: S36-37, 2009. (presented at St Gallen international conference on primary therapy of early breast cancer, March, 2009)
  3. DeSnoo F, Glas A and Bender RA, Early Prognosis Prediction: MammaPrint on core-needle biopsies. *The Breast* 18: S 37, 2009. (presented at St Gallen international conference on primary therapy of early breast cancer, March , 2009)
  4. Saha S, Wiese D, Kanaan M, Loesch D, Ashfaq R, Alarcon A, Gerkin R and Bender R. Immunohistochemical Biomarker assessment of Stage III Colon Cancer undergoing Sentinel lymph node mapping using “Caris Target Now” on overall survival and recurrence. Submitted to Society of Surgical Oncology, September, 2011.
  5. Basu G, McGinniss M, Alarcon A, Kemkes A and Bender R, “Differences in gene expression between primary chemotherapy-naïve prostate carcinomas and hormone-refractory prostate carcinomas” to be presented at ASCO-EORTC conference on “Molecular Targets and Cancer Therapeutics” in San Francisco, November 12-16, 2011.
  6. Loesch D, Waisman J, Link J, Alarcon A, Boehm K, Ghazadpour A and Bender R, Personalized Treatment of Advanced Metastatic Breast Cancer (MBC) Utilizing Target Now in a Community-

Based Oncology Practice. Submitted for presentation at San Antonio Breast Cancer Symposium, San Antonio, TX December 7-10, 2011.

7. Van Laar, Farmer P, Zielinski A, Brown N and Bender R. The 70-gene MyPRS prognostic risk signature predicts increased risk of progression from MGUS of MM requiring treatment. Presented at the American Society of Hematology meeting, December, 2016.
8. Van Laar R, Zielinski A, Leigh K, Brown N and Bender R, Validation of MyPRS Clinical Gene Expression Profiling for Multiple Myeloma using 20-2000 Cells. Presented at the American Society of Hematology meeting, December, 2016.

Dated July, 2024