

Stanford



Dr. Gregory Bean

Assistant Professor of Pathology

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

William Santos - Administrative Assistant

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Bio

BIO

Dr. Bean is an Assistant Professor who specializes in breast pathology. His research interests include molecular characterization of breast cancer subtypes and precursors. He is also involved with the training of residents and fellows on the breast service.

CLINICAL FOCUS

- Anatomic Pathology
- Breast Pathology
- Molecular Pathology

ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Pathology

ADMINISTRATIVE APPOINTMENTS

- Associate Director, Breast Pathology Service, (2022- present)

PROFESSIONAL EDUCATION

- Residency: UCSF Pathology Residency (2017) CA
- Medical Education: Washington University School Of Medicine Registrar (2014) MO
- Board Certification: Anatomic Pathology, American Board of Pathology (2017)
- Doctor of Philosophy, Washington University School Of Medicine , MO (2014)

Publications

PUBLICATIONS

- **Genetic and immunohistochemical profiling of small cell and large cell neuroendocrine carcinomas of the breast.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Bean, G. R., Najjar, S., Shin, S. J., Hosfield, E. M., Caswell-Jin, J. L., Urisman, A., Jones, K. D., Chen, Y., Krings, G.
2022
- **Nodular fasciitis of the breast: clinicopathologic and molecular characterization with identification of novel USP6 fusion partners.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Cloutier, J. M., Kunder, C. A., Charville, G. W., Hosfield, E. M., García, J. J., Brown, R. A., Troxell, M. L., Allison, K. H., Bean, G. R.
2021
- **Primary mammary angiosarcomas harbor frequent mutations in KDR and PIK3CA and show evidence of distinct pathogenesis.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Beca, F., Krings, G., Chen, Y., Hosfield, E. M., Vohra, P., Sibley, R. K., Troxell, M. L., West, R. B., Allison, K. H., Bean, G. R.
2020
- **NTRK Fusion Cervical Sarcoma: A Report of 3 Cases, Emphasizing Morphological and Immunohistochemical Distinction from Other Uterine Sarcomas, including Adenosarcoma.** *Histopathology*
Rabban, J. T., Devine, P., Sangoi, A. R., Poder, L., Alvarez, E., Davis, J. L., Rudzinski, E., Garg, K., Bean, G. R.
2020
- **CRTC1-MAML2 fusion in mucoepidermoid carcinoma of the breast** *HISTOPATHOLOGY*
Bean, G. R., Krings, G., Otis, C. N., Solomon, D. A., Garcia, J. J., van Zante, A., Camelo-Piragua, S., van Ziffle, J., Chen, Y.
2019; 74 (3): 463–73
- **DICER1 mutations are frequent in müllerian adenosarcomas and are independent of rhabdomyosarcomatous differentiation.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Bean, G. R., Anderson, J., Sangoi, A. R., Krings, G., Garg, K.
2018
- **Recurrent GNAQ mutations in anastomosing hemangiomas** *MODERN PATHOLOGY*
Bean, G. R., Joseph, N. M., Gill, R. M., Folpe, A. L., Horvai, A. E., Umetsu, S. E.
2017; 30 (5): 722-727
- **Contemporary diagnostic approach to atypical vascular lesion and angiosarcoma.** *Seminars in diagnostic pathology*
Rutland, C. D., Bean, G. R., Charville, G. W.
2023
- **Triple-Negative Apocrine Carcinomas: Toward a Unified Group With Shared Molecular Features and Clinical Behavior.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Schwartz, C. J., Ruiz, J., Bean, G. R., Sirohi, D., Joseph, N. M., Hosfield, E. M., Jacobs, T. W., Mukhtar, R. A., Chen, Y. Y., Krings, G.
2023; 36 (5): 100125
- **Uterine Inflammatory Myofibroblastic Tumors: Proposed Risk Stratification Model Using Integrated Clinicopathologic and Molecular Analysis.** *The American journal of surgical pathology*
Ladwig, N. R., Bean, G. R., Pekmezci, M., Boscardin, J., Joseph, N. M., Therrien, N., Sangoi, A. R., Piening, B., Rajamanickam, V., Galvin, M., Bernard, B., Zaloudek, C., Rabban, et al
2022
- **Transcriptional and Immune Landscape of Cardiac Sarcoidosis.** *Circulation research*
Liu, J., Ma, P., Lai, L., Villanueva, A., Koenig, A., Bean, G. R., Bowles, D. E., Glass, C., Watson, M., Lavine, K. J., Lin, C. Y.
2022: 101161CIRCRESAHA121320449
- **The interaction of SWI/SNF with the ribosome regulates translation and confers sensitivity to translation pathway inhibitors in cancers with complex perturbations.** *Cancer research*
Ulicna, L., Kimmey, S. C., Weber, C. M., Allard, G. M., Wang, A., Bui, N. Q., Bendall, S. C., Crabtree, G. R., Bean, G. R., Van Rechem, C.
2022

- **The Tabula Sapiens: A multiple-organ, single-cell transcriptomic atlas of humans.** *Science (New York, N.Y.)*
Jones, R. C., Karkania, J., Krasnow, M. A., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., Harper, W., Hemenez, M., Ponnusamy, R., Salehi, et al
2022; 376 (6594): eabl4896
- **Publisher Correction: Cell types of origin of the cell-free transcriptome.** *Nature biotechnology*
Vorperian, S. K., Moufarrej, M. N., Tabula Sapiens Consortium, Quake, S. R., Jones, R. C., Karkania, J., Krasnow, M., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., et al
2022
- **Cell types of origin of the cell-free transcriptome.** *Nature biotechnology*
Vorperian, S. K., Moufarrej, M. N., Tabula Sapiens Consortium, Quake, S. R., Jones, R. C., Karkania, J., Krasnow, M., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., et al
2022
- **RNA splicing programs define tissue compartments and cell types at single-cell resolution** *ELIFE*
Olivieri, J., Dehghannasiri, R., Wang, P. L., Jang, S., de Morree, A., Tan, S. Y., Ming, J., Wu, A., Consortium, T., Quake, S. R., Krasnow, M. A., Salzman, J.
2021; 10
- **Skin angiography assisted mastectomy in secondary breast angiosarcoma: Complete clinical response after neoadjuvant immunotherapy.** *The breast journal*
Ju, T., Foster, D., Titan, A., Najjar, S., Bean, G. R., Ganjoo, K., Wapnir, I.
2021
- **Spatial proteomic characterization of HER2-positive breast tumors through neoadjuvant therapy predicts response** *NATURE CANCER*
McNamara, K. L., Caswell-Jin, J. L., Joshi, R., Ma, Z., Kotler, E., Bean, G. R., Kriner, M., Zhou, Z., Hoang, M., Beechem, J., Zoeller, J., Press, M. F., Slamon, et al
2021; 2 (4): 400-+
- **Spatial proteomic characterization of HER2-positive breast tumors through neoadjuvant therapy predicts response.** *Nature cancer*
McNamara, K. L., Caswell-Jin, J. L., Joshi, R., Ma, Z., Kotler, E., Bean, G. R., Kriner, M., Zhou, Z., Hoang, M., Beechem, J., Zoeller, J., Press, M. F., Slamon, et al
2021; 2 (4): 400-413
- **PDGFB RNA in situ hybridization for the diagnosis of dermatofibrosarcoma protuberans.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Cloutier, J. M., Allard, G. n., Bean, G. R., Hornick, J. L., Charville, G. W.
2021
- **Molecular Testing in Breast Cancer: Current Status and Future Directions.** *The Journal of molecular diagnostics : JMD*
Sun, L., Wu, A., Bean, G. R., Hagemann, I. S., Lin, C. Y.
2021
- **Evaluation of ductal carcinoma in situ grade via triple-modal molecular imaging of B7-H3 expression.** *NPJ breast cancer*
Bachawal, S., Bean, G. R., Krings, G., Wilson, K. E.
2020; 6 (1): 14
- **Molecular Characterization of Metanephric Adenomas Beyond BRAF: Genetic Evidence for Potential Malignant Evolution.** *Histopathology*
Chan, E., Stohr, B. A., Croom, N. A., Cho, S., Garg, K., Troxell, M. L., Higgins, J. P., Bean, G. R.
2020
- **Efficacy of affibody-based ultrasound molecular imaging of vascular B7-H3 for breast cancer detection.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
Bam, R. n., Lown, P. S., Stern, L. A., Sharma, K. n., Wilson, K. E., Bean, G. R., Lutz, A. M., Paulmurugan, R. n., Hackel, B. J., Dahl, J. n., Abou-Elkacem, L. n.
2020
- **Pathologic and molecular responses to neoadjuvant trastuzumab and/or lapatinib from a phase II randomized trial in HER2-positive breast cancer (TRIO-US B07).** *Nature communications*
Hurvitz, S. A., Caswell-Jin, J. L., McNamara, K. L., Zoeller, J. J., Bean, G. R., Dichmann, R., Perez, A., Patel, R., Zehngbot, L., Allen, H., Bosserman, L., DiCarlo, B., Kennedy, et al
2020; 11 (1): 5824
- **HER2 Dual In Situ Hybridization: Correlations and Cautions.** *Archives of pathology & laboratory medicine*

Troxell, M. n., Sibley, R. K., West, R. B., Bean, G. R., Allison, K. H.
2020

- **Pan-TRK Immunohistochemistry: A Useful Diagnostic Adjunct For Secretory Carcinoma of the Breast.** *The American journal of surgical pathology*
Harrison, B. T., Fowler, E., Krings, G., Chen, Y., Bean, G. R., Vincent-Salomon, A., Fuhrmann, L., Barnick, S. E., Chen, B., Hosfield, E. M., Hornick, J. L., Schnitt, S. J.
2019
- **Synchronous Breast Implant-associated Anaplastic Large Cell Lymphoma and Invasive Carcinoma: Genomic Profiling and Management Implications.** *Plastic and reconstructive surgery. Global open*
Mukhtar, R. A., Holland, M., Sieber, D. A., Wen, K. W., Rugo, H. S., Kadin, M. E., Bean, G. R.
2019; 7 (4): e2188
- **Recurrent GNA14 mutations in anastomosing haemangiomas.** *Histopathology*
Bean, G. R., Joseph, N. M., Folpe, A. L., Horvai, A. E., Umetsu, S. E.
2018; 73 (2): 354-357
- **Adipocyte size variability in benign and malignant lipomatous tumors and morphologic mimics: a quantitative definition using digital pathology.** *Human pathology*
Bean, G. R., Wen, K. W., Horvai, A. E.
2018; 72: 52-58
- **Fibroepithelial lesions; The WHO spectrum.** *Seminars in diagnostic pathology*
Krings, G., Bean, G. R., Chen, Y. Y.
2017; 34 (5): 438-452
- **Genomic profiling of breast secretory carcinomas reveals distinct genetics from other breast cancers and similarity to mammary analog secretory carcinomas.** *Modern pathology*
Krings, G., Joseph, N. M., Bean, G. R., Solomon, D., Onodera, C., Talevich, E., Yeh, I., Grenert, J. P., Hosfield, E., Crawford, E. D., Jordan, R. C., van Zante, A., Zaloudek, et al
2017
- **Arginine Deprivation Inhibits the Warburg Effect and Upregulates Glutamine Anaplerosis and Serine Biosynthesis in ASS1-Deficient Cancers** *CELL REPORTS*
Kremer, J. C., Prudner, B. C., Lange, S. E., Bean, G. R., Schultze, M. B., Brashears, C. B., Radyk, M. D., Redlich, N., Tzeng, S., Kami, K., Shelton, L., Li, A., Morgan, et al
2017; 18 (4): 991-1004
- **A metabolic synthetic lethal strategy with arginine deprivation and chloroquine leads to cell death in ASS1-deficient sarcomas** *CELL DEATH & DISEASE*
Bean, G. R., Kremer, J. C., Prudner, B. C., Schenone, A. D., Yao, J., Schultze, M. B., Chen, D. Y., Tanas, M. R., Adkins, D. R., Bomalaski, J., Rubin, B. P., Michel, L. S., Van Tine, et al
2016; 7
- **PUMA and BIM Are Required for Oncogene Inactivation-Induced Apoptosis** *SCIENCE SIGNALING*
Bean, G. R., Ganesan, Y. T., Dong, Y., Takeda, S., Liu, H., Chan, P. M., Huang, Y., Chodosh, L. A., Zambetti, G. P., Hsieh, J. J., Cheng, E. H.
2013; 6 (268)
- **BID, BIM, and PUMA Are Essential for Activation of the BAX- and BAK-Dependent Cell Death Program** *SCIENCE*
Ren, D., Tu, H., Kim, H., Wang, G. X., Bean, G. R., Takeuchi, O., Jeffers, J. R., Zambetti, G. P., Hsieh, J. J., Cheng, E. H.
2010; 330 (6009): 1390-1393
- **CpG Island Tumor Suppressor Promoter Methylation in Non-BRCA-Associated Early Mammary Carcinogenesis** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Vasilatos, S. N., Broadwater, G., Barry, W. T., Baker, J. C., Lem, S., dietze, E. C., Bean, G. R., Bryson, A. D., Pilie, P. G., Goldenberg, V., Skaar, D., Paisie, C., Torres-Hernandez, et al
2009; 18 (3): 901-914
- **ESR1 promoter hypermethylation does not predict atypia in RPFNA nor persistent atypia after 12 months tamoxifen chemoprevention** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Baker, J. C., Ostrander, J. H., Lem, S., Broadwater, G., Bean, G. R., D'Amato, N. C., Goldenberg, V. K., Rowell, C., Ibarra-Drendall, C., Grant, T., Pilie, P. G., Vasilatos, S. N., Troch, et al

2008; 17 (8): 1884-1890

- **Morphologically normal-appearing mammary epithelial cells obtained from high-risk women exhibit methylation silencing of INK4a/ARF** *CLINICAL CANCER RESEARCH*
Bean, G. R., Bryson, A. D., Pilie, P. G., Goldenberg, V., Baker, J. C., Ibarra, C., Brander, D. M., Paisie, C., Case, N. R., Gauthier, M., Reynolds, P. A., Dietze, E., Ostrander, et al
2007; 13 (22): 6834-6841
- **Atypia in random periareolar fine-needle aspiration affects the decision of women at high risk to take tamoxifen for breast cancer chemoprevention** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Goldenberg, V. K., Seewaldt, V. L., Scott, V., Bean, G. R., Broadwater, G., Fabian, C., Kimler, B., Zalles, C., Lipkus, I. M.
2007; 16 (5): 1032-1034
- **Interferon regulatory factor-1 regulates reconstituted extracellular matrix (rECM)-mediated apoptosis in human mammary epithelial cells** *ONCOGENE*
Bowie, M. L., Troch, M. M., Delrow, J., Dietze, E. C., Bean, G. R., Ibarra, C., Pandiyan, G., Seewaldt, V. L.
2007; 26 (14): 2017-2026
- **Overweight and obese perimenopausal and postmenopausal women exhibit increased abnormal mammary epithelial cytology** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Seewaldt, V. L., Goldenberg, V., Jones, L. W., Peace, C., Broadwater, G., Scott, V., Bean, G. R., Wilke, L. G., Zalles, C. M., Demark-Wahnefried, W.
2007; 16 (3): 613-616
- **Hypermethylation of the breast cancer-associated gene 1 promoter does not predict cytologic atypia or correlate with surrogate end points of breast cancer risk** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Bean, G. R., Drendall, C. I., Goldenberg, V. K., Baker, J. C., Troch, M. M., Paisie, C., Wilke, L. G., Yee, L., Marcorn, P. K., Kimler, B. F., Fabian, C. J., Zalles, C. M., Broadwater, et al
2007; 16 (1): 50-56
- **Long-term raloxifene in a woman at high risk for breast cancer** *NEW ENGLAND JOURNAL OF MEDICINE*
Bean, G. R., Kimler, B. F., Seewaldt, V. L.
2006; 355 (15): 1620-1622
- **CREB-binding protein regulates apoptosis and growth of HMECs grown in reconstituted ECM via laminin-5** *JOURNAL OF CELL SCIENCE*
Dietze, E. C., Bowie, M. L., Mrozek, K., Caldwell, L. E., Neal, C., Marjoram, R. J., Troch, M. M., Bean, G. R., Yokoyama, K. K., Ibarra, C. A., Seewaldt, V. L.
2005; 118 (21): 5005-5022
- **Retinoic acid receptor-beta 2 promoter methylation in random periareolar fine needle aspiration** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Bean, G. R., Scott, V., Yee, L., Ratliff-Daniel, B., Troch, M. M., Seo, P., Bowie, M. L., Marcom, P. K., Slade, J., Kimler, B. F., Fabian, C. J., Zalles, C. M., Broadwater, et al
2005; 14 (4): 790-798
- **Interferon-regulatory factor-1 is critical for tamoxifen-mediated apoptosis in human mammary epithelial cells** *ONCOGENE*
Bowie, M. L., Dietze, E. C., Delrow, J., Bean, G. R., Troch, M. M., Marjoram, R. J., Seewaldt, V. L.
2004; 23 (54): 8743-8755
- **Re: Active tamoxifen metabolite plasma concentrations after coadministration of tamoxifen and the selective serotonin reuptake inhibitor paroxetine** *JOURNAL OF THE NATIONAL CANCER INSTITUTE*
Ratliff, B., Dietze, E. C., Bean, G. R., Moore, C., Wanko, S., Seewaldt, V. L.
2004; 96 (11): 883-883
- **Tamoxifen and tamoxifen ethyl bromide induce apoptosis in acutely damaged mammary epithelial cells through modulation of AKT activity** *ONCOGENE*
Dietze, E. C., Troch, M. M., Bean, G. R., Heffner, J. B., Bowie, M. L., Rosenberg, P., Ratliff, B., Seewaldt, V. L.
2004; 23 (21): 3851-3862
- **CBP/p300 induction is required for retinoic acid sensitivity in human mammary cells** *BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS*
Dietze, E. C., Troch, M. M., Bowie, M. L., Yee, L., Bean, G. R., Seewaldt, V. L.
2003; 302 (4): 841-848
- **Retinoids and retinoic acid receptors regulate growth arrest and apoptosis in human mammary epithelial cells and modulate expression of CBP/p300** *MICROSCOPY RESEARCH AND TECHNIQUE*

Dietze, E. C., Caldwell, L. E., Marcom, K., Collins, S. J., Yee, L., Swisshelm, K., Hobbs, K. B., Bean, G. R., Seewaldt, V. L.
2002; 59 (1): 23-40