

CURRICULUM VITAE

Charles W. Drescher, MD

Medical Practice

Pacific Gynecology Specialists
1101 Madison Street, Suite 1500
Seattle, Washington 98104
(206) 965-1700

Research Activities/Affiliation

Fred Hutchinson Cancer Research Center
1100 Fairview Avenue North, M2-B230
Seattle, WA 98109
cdresche@fhcrc.org

Educational Background

- 1987-1989 Fellow, Gynecologic Oncology, Medical Center, University of Michigan, Ann Arbor, Michigan
- 1983-1987 Residency, Obstetrics and Gynecology, Medical School, University of Michigan, Ann Arbor, Michigan
- 1982-1983 Flexible Internship, School of Medicine, University of Washington, Seattle, Washington
- 1978-1982 MD in Medicine, University of Michigan, Ann Arbor, Michigan

Professional Positions and Training

- 2010-Present Board of Directors, Marsha Rivkin Center for Ovarian Cancer Research, Seattle, Washington
- 2008-Present Joint Member, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, Washington
- 2006-Present Clinical Professor; Department of Obstetrics and Gynecology, University of Washington, Seattle, Washington
- 1992-Present Co-Principal Investigator, Gynecology Oncology Group, University of Washington-Puget Sound Oncology Consortium, Seattle, Washington
- 1989-Present Pacific Gynecology Specialists, Seattle, Washington
- 1994-2007 Joint Associate Member, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, Washington
- 1998-2006 Clinical Associate Professor; Department of Obstetrics and Gynecology, University of Washington, Seattle, Washington
- 1996-2005 Medical Director, Marsha Rivkin Center for Ovarian Cancer Research, Seattle, Washington
- 1998-2002 Member Cancer Prevention Committee, Gynecological Oncology Group
- 1991-1998 Clinical Assistant Professor, Department of Obstetrics and Gynecology, University of Washington, Seattle, Washington
- 1990-1994 Consultant, Cancer Prevention Research Program, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, Washington

- 1994-1995 Executive Committee Member, Puget Sound Oncology Consortium, Seattle, Washington
- 1990-1992 Gynecology Committee Member, Southwest Oncology Group, Seattle, Washington
- 1987-1989 Instructor, Obstetrics and Gynecology, University of Michigan Medical Center, Ann Arbor, Michigan
- 1986-1987 Guest Lecturer and Surgeon, Komfo Anokye Teaching Hospital, Kumasi, Ghana

Board Certification and Licensure

State of Michigan Medical License
 State of Washington Medical License

- December 2008 Re-certification Obstetrics and Gynecology
- December 2008 Re-certification Gynecological Oncology
- December 1992 Gynecological Oncology
- December 1990 Obstetrics and Gynecology

Honors and Awards

- 1978-1981 James B Angell Scholar
- Phi Beta Kappa
- 1990, 1991, 2002 Resident Award for Teaching Excellence, Department of Obstetrics and Gynecology, University of Washington, Seattle, Washington
- 2000, 2002, 2004,
2006 - 2011 Seattle's Best Doctors, Seattle Magazine August
Seattle's Best Doctors, Hall of Fame, Seattle Magazine
- 2007, 2008, 2009, 2011 Seattle's Best Doctors, Seattle Metropolitan Magazine
- 2002- 2005, 2007-2011 Best Doctors in America- Best Doctors in America Inc.

Professional Activities

Professional Memberships:
 American Medical Association
 Gynecologic Cancer Foundation
 King County Medical Society
 Seattle Gynecological Society
 Society of Gynecologic Oncologists
 Washington State Medical Association

Scientific Reviewer for the following journals:
 American Journal of Obstetrics and Gynecology
 Clinical Cancer Research
 Cancer Research
 Cancer

Gynecological Oncology
Obstetrics and Gynecology
Journal of Proteome Research
Science Translational Research

Ad-Hoc Reviewer – Department of Defense, Ovarian Cancer Research Program 2008

Ad-Hoc Reviewer – Foundation Fournier-Majoie pour l'Innovation 2008

Canary Foundation Scientific Advisory Board, Co- Leader Ovarian Cancer Science
Team, 2006 – Present

NCI Gynecological Cancer Steering Committee Member, 2007- Present

Co-PI Gynecological Oncology Group, University Washington/Puget Sound Site

Gynecology Committee Member, Puget Sound Oncology Consortium, Seattle,
Washington, 1990 – Present

Illumina, Inc., Ovarian Cancer Advisory Board Member, 2010 – Present

Research Papers in Refereed Journals

2012

Submitted:

Drescher CW, Shah C, Thorpe J, O'Briant K, Anderson GL, Berg CD, Urban N, McIntosh MW. A Longitudinal Screening Algorithm that Incorporates Change Over Time in CA125 Levels Identifies Ovarian Cancer Earlier than a Single Threshold Rule. [Submitted to *Journal of Clinical Oncology*].

Pocobelli G, Chubak J, Hanson N, **Drescher CW**, Resta R, Urban N, Buist D. Prophylactic oophorectomy rates in relation to a guideline update on referral to genetic counseling. [Submitted to *Gynecologic Oncology*].

In Press:

Beyer I, Persson J, Song H, Cao H, Feng Q, Yumul R, van Rensburg R, Li ZY, Berenson R, Carter D, Roffler S, **Drescher C**, Lieber A. Co-administration of epithelial junction opener JO-1 improves the efficacy and safety of chemotherapeutic drugs. [Submitted to *Clinical Cancer Research*].

Drescher CW, Hawley S, Thorpe JD, Marticke S, McIntosh M, Gambhir S, Urban N. Impact of screening test performance and cost on mortality reduction and cost-effectiveness of multimodal ovarian cancer screening. [Provisionally Accepted to *Cancer Prevention Research*].

Published:

1. Schummer M, **Drescher C**, Forrest R, Gough S, Thorpe J, Hellström I, Hellström KE, Urban N. Evaluation of ovarian cancer remission markers HE4, MMP7 and Mesothelin by comparison to the established marker CA125. *Gynecol Oncol*. 2012 Apr;125(1):65-9. PMID: PMC3303992
2. Andersen MR, Sweet E, Lowe KA, Standish LJ, **Drescher CW**, Goff BA. Involvement in decision-making about treatment and ovarian cancer survivor quality of life. *Gynecol Oncol*. 2012 Mar;124(3):465-70.
3. Knouf EC, Garg K, Arroyo JD, Correa Y, Sarkar D, Parkin RK, Wurz K, O'Briant KC, Godwin AK, Urban ND, Ruzzo WL, Gentleman R, **Drescher CW**, Swisher EM, Tewari M. An integrative genomic approach identifies p73 and p63 as activators of miR-200 microRNA family transcription. *Nucleic Acids Res*. 2012 Jan 1;40(2):499-510. PMID: PMC3258134

2011

4. Urban N, Thorpe JD, Bergan L, Forrest R, Kampani A, Scholler N, O'Briant K, Anderson GL, Cramer DW, Berg CD, McIntosh M, Hartge P, **Drescher CW**. Potential role of HE4 in multimodal screening for epithelial ovarian cancer. *J Natl Cancer Inst*. 2011 Nov 2;103(21):1630-4. PMID: PMC3206037

5. Salzman J, Marinelli RJ, Wang PL, Green AE, Nielsen JS, Nelson BH, **Drescher CW**, Brown PO. ESRRA-C11orf20 Is a Recurrent Gene Fusion in Serous Ovarian Carcinoma. *PLoS Biology*. 2011 Sep;9(9):e1001156. PMID: PMC3176749
6. Skates SJ, Mai P, Horick NK, Piedmonte M, **Drescher CW**, et al. Large Prospective Study of Ovarian Cancer Screening in High-Risk Women: CA125 Cut-Point Defined by Menopausal Status. *Cancer Prev Res (Phila)*. 2011 Sep;4(9):1401-8. PMID: PMC3172691
7. Paley PJ, Veljovich DS, Shah CA, Everett EN, Bondurant AE, **Drescher CW**, Peters WA, 3rd. Surgical outcomes in gynecologic oncology in the era of robotics: analysis of first 1000 cases. *Am J Obstet Gynecol*. 2011 Jun;204(6):551.e1-9.
8. Lutz AM, Willmann JK, **Drescher CW**, Ray P, Cochran FV, Urban N, Gambhir SS. Early Diagnosis of Ovarian Carcinoma: Is a Solution in Sight? *Radiology*. 2011 May;259(2):329-45.
9. Strauss R, Li Z, Liu Y, Beyer I, Persson J, Sova P, Moller T, Pesonen S, Hemminki A, Hamerlik P, **Drescher CW**, Urban N, Bartek J, Lieber A. Analysis of Epithelial and Mesenchymal Markers in Ovarian Cancer Reveals Phenotypic Heterogeneity and Plasticity. *PLoS ONE*. 2011 Jan 14;6(1):e16186. PMID: PMC3021543
10. Wang H, Li ZY, Liu Y, Persson J, Beyer I, Möller T, Koyuncu D, Drescher MR, Strauss R, Zhang XB, Wahl JK, Urban N, **Drescher C**, Hemminki A, Fender P, Lieber A. Desmoglein 2 is a receptor for adenovirus serotypes 3, 7, 11, and 14. *Nature Medicine*. 2011 Jan;17(1):96-104. PMID: PMC3074512

2010

11. Ventura AP, Radhakrishnan S, Green A, Rajaram SK, Allen AN, O'Briant K, aSchummer M, Karlan B, Urban N, Tewari M, **Drescher C**, Knudsen BS. Activation of the MEK-S6 Pathway in High-grade Ovarian Cancers. *Appl Immunohistochem Mol Morphol*. 2010 Dec;18(6):499-508. PMID: PMC2989426
12. Amon LM, Law W, Fitzgibbon MP, Gross JA, O'Briant K, Peterson A, **Drescher C**, Martin DB, McIntosh M. Integrative Proteomic Analysis of Serum and Peritoneal Fluids Helps Identify Proteins that Are Up-Regulated in Serum of Women with Ovarian Cancer. *PLoS ONE*. 2010; 5(6): e11137. PMID: PMC2886122
13. **Drescher CW**, Karlan BY. Progress Towards Ovarian Cancer Early Detection: Strategies, Guidelines and Clinical Trials. *The Female Patient*. 2010 Apr; 35(4).
14. Andersen MR, Goff BA, Lowe KA, Scholler N, Bergan L, **Drescher CW**, Paley P, Urban N. Use of a Symptom Index, CA125 and HE4 to predict ovarian cancer. *Gynecologic Oncology*. 2010 Mar; 116(3):378-383. PMID: PMC2822097
15. Houshdaran S, Hawley S, Palmer C, Campan M, Olsen MN, Ventura AP, Knudsen BS, **Drescher CW**, Urban ND, Brown PO, Laird PW. DNA methylation profiles of ovarian epithelial carcinoma tumors and cell lines. *PLoS ONE*. 2010 Feb 22;5(2):e9359. PMID: PMC2825254
16. Anderson GL, McIntosh MW, Wu L, Barnett M, Goodman G, Thorpe JD, Bergan L, Thornquist MD, Scholler N, Kim N, O'Briant K, **Drescher C**, Urban N. Assessing Lead Time of Selected Ovarian Cancer Biomarkers: A Nested Case-Control Study. *J Natl Cancer Inst*. 2010 Jan 6;102(1):26-38. PMID: PMC2802285

17. Bendoraite A, Knouf EC, Garg KS, Parkin RK, Kroh EM, O'Briant KC, Ventura AP, Godwin AK, Karlan BY, **Drescher CW**, Urban N, Knudsen B, Tewari M. Regulation of miR-200 family microRNAs and ZEB transcription factors in ovarian cancer: Evidence supporting a mesothelial-to-epithelial transition. *Gynecologic Oncology*. 2010 Jan; 116(1):117-25. PMID: PMC2867670

2009

18. Lowe KA, Andersen MR, Urban N, Paley P, **Drescher CW**, Goff BA. The temporal stability of the Symptom Index among women at high-risk for ovarian cancer. *Gynecologic Oncology*. 2009 Aug;114(2):225-30. PMID: PMC2736546
19. Pan S, Cheng L, White JT, Lu W, Utleg AG, Yan X, Urban ND, **Drescher CW**, Hood L, Lin B. Quantitative Proteomics Analysis Integrated with Microarray Data Reveals That Extracellular Matrix Proteins, Catenins, and P53 Binding Protein 1 Are Important for Chemotherapy Response in Ovarian Cancers. *OMICS*. 2009 Aug;13(4):345-54. NIHMSID: NIHMS233671
20. Strauss R, Sova P, Liu Y, Li Z, Tuve S, Pritchard D, Brinkkoetter P, Moller T, Wildner O, Pesonen S, Hemminki A, Urban N, **Drescher CW**, Lieber A. Epithelial Phenotype Confers Resistance of Ovarian Cancer Cells to Oncolytic Adenoviruses. *Cancer Res*. 2009 Jun 15;69(12):5115-25. PMID: PMC2738419
21. Shah CA, Lowe KA, Paley P, Wallace E, Anderson GL, McIntosh MW, Andersen, MR, Scholler N, Bergan LA, Thorpe JD, Urban N, **Drescher CW**. Influence of Ovarian Cancer Risk Status on the Diagnostic Performance of the Serum Biomarkers Mesothelin, HE4 and CA125. *Cancer Epidemiology Biomarkers and Prevention*. 2009 May;113(5):1038-45. PMID: PMC2714056
22. Schilder RJ, Pathak HB, Lokshin AE, Holloway RW, Alvarez RD, Aghajanian C, Min H, Devarajan K, Ross E, **Drescher C**, Godwin AK. Phase II trial of single agent Cetuximab in patients with persistent or recurrent epithelial ovarian or primary peritoneal carcinoma with the potential for dose escalation to rash. *Gynecologic Oncology*. 2009 Apr;113(1):21-7. PMID: PMC2741166
23. Wyman SK, Parkin RK, Mitchell PS, Fritz BR, O'Briant K, Godwin AK, Urban N, **Drescher CW**, Knudsen BS, Tewari M. Repertoire of microRNAs in epithelial ovarian cancer as determined by next generation sequencing of small RNA cDNA libraries. *PLoS ONE*. 2009;4(4):e5311. PMID: PMC2668797
24. Sarkar D, Parkin R, Wyman S, Bendoraite A, Sather C, Delrow J, Godwin AK, **Drescher C**, Huber W, Gentleman R, Tewari M. Quality Assessment and Data Analysis for microRNA Expression Arrays. *Nucleic Acids Research*. 2009 Feb;37(2):e17. PMID: PMC2632898

2008

25. McIntosh M, Anderson G, **Drescher C**, Hanash S, Urban N, Brown P, Gambhir SS, Coukos G, Laird PW, Nelson B, Palmer C. Ovarian cancer early detection claims are biased. *Clinical Cancer Research*. 2008 Nov 15;14(22):7574.
26. Feng Q, Deftereos G, Hawes SE, Stern JE, Willner JB, Swisher EM, Xi L, **Drescher C**, Urban N, Kiviat N. DNA hypermethylation, Her-2/neu overexpression and p53 mutations in ovarian carcinoma. *Gynecologic Oncology*. 2008 Nov;111(2):320-9. PMID: PMC2642648

27. Lowe K, Shah C, Wallace E, Anderson G, Paley P, McIntosh M, Andersen R, Scholler N, Bergan L, Thorpe J, Urban N, **Drescher C**. Effects of Personal Characteristics on Serum CA125, Mesothelin, and HE4 Levels in Healthy Postmenopausal Women at High-Risk for Ovarian Cancer. *Cancer Epidemiology Biomarkers and Prevention*. 2008 Sep;17(9):2480-7. PMID: PMC2632599
28. Andersen MR, Goff BA, Lowe KA, Scholler N, Bergan L, **Drescher CW**, Paley P, Urban N. Combining a symptoms index with CA 125 to improve detection of ovarian cancer. *Cancer*. 2008 Aug 1;113(3):484-9. PMID: PMC2734274
29. Mitchell PS, Parkin RK, Kroh EM, Fritz BR, Wyman SK, Pogosova-Agadjanyan EL, Peterson A, Noteboom J., O'Briant KC, Allen A, Lin DW, Urban N, **Drescher CW**, Knudsen BS, Stirewalt DL, Gentleman R, Vessella RL, Nelson PS, Martin DB, Tewari M. Circulating microRNAs as stable blood-based markers for cancer detection. *Proc Natl Acad Sci U S A*. 2008 Jul 29;105(30):10513-8. PMID: PMC2492472
30. Palmer C, Duan X, Hawley S, Scholler N, Thorpe JD, Sahota RA, Wong MQ, Wray A, Bergan LA, **Drescher CW**, McIntosh MW, Brown PO, Nelson BH, Urban N. Systematic evaluation of candidate blood markers for detecting ovarian cancer. *PLoS ONE*. 2008 Jul 9;3(7):e2633. PMID: PMC2440813
31. Faça VM, Ventura AP, Fitzgibbon MP, Pereira-Faça SR, Pitteri SJ, Green AE, Ireton RC, Zhang Q, Wang H, O'Briant KC, **Drescher CW**, Schummer M, McIntosh MW, Knudsen BS, Hanash SM. Proteomic analysis of ovarian cancer cells reveals dynamic processes of protein secretion and shedding of extra-cellular domains. *PLoS ONE*. 2008 Jun 18;3(6):e2425. PMID: PMC2642648
32. Veljovich DS, Paley PJ, **Drescher CW**, Everett EN, Shah C, Peters WA 3rd. Robotic surgery in gynecologic oncology: program initiation and outcomes after the first year with comparison with laparotomy for endometrial cancer staging. *American Journal of Obstetrics Gynecology*. 2008 Jun;198(6):679.e1-9; discussion 679.e9-10.
33. Urban N, **Drescher C**. Potential and limitations in early diagnosis of ovarian cancer. *Advances in Experimental Medicine and Biology*. 2008;622:3-14.

2007

34. Lutz AM, Ray P, Willmann JK, **Drescher C**, Gambhir SS. 2-Deoxy-2-[F-18]fluoro-D: -glucose Accumulation in Ovarian Carcinoma Cell Lines. *Molecular Imaging and Biology*. 2007 Sep-Oct;9(5):260-6.
35. Andersen M, **Drescher C**, Zheng Y, Bowen D, Wilson S, Young A, McIntosh M, Mahony B, Lowe K, Urban N. Changes in cancer worry associated with participation in ovarian cancer screening. *Psycho-Oncology*. 2007 Sept; 16(9):814-20. doi: 10.1002/pon.1151.
36. McIntosh MW, Liu Y, **Drescher C**, Urban N, Diamandis EP. Validation and characterization of human kallikrein 11 as a serum marker for diagnosis of ovarian carcinoma. *Clinical Cancer Research*. 2007 Aug 1;13(15 Pt 1):4422-8.
37. Goff BA, Mandel LS, **Drescher CW**, Urban N, Gough S, Schurman KM, Patras J, Mahoney BS, Andersen MR. Development of an ovarian cancer symptom index: Possibilities for earlier detection. *Cancer*. 2007 Jan 15; 109(2):221-227.

2006

38. Shah C, Pizer E, Veljovich DS, **Drescher CW**, Peters WA 3rd, Paley PJ. Clear cell adenocarcinoma of the vagina in a patient with vaginal endometriosis. *Gynecologic Oncology*. 2006 Dec; 103(3):1130-2.
39. Urban N, **Drescher C**. Current and future developments in screening for ovarian cancer. *Women's Health*. 2006 Sep; 2(5):733-42.
40. Stewart JJ, White JT, Yan x, Collins S, **Drescher CW**, Urban ND, Hood L, Lin B. Proteins associated with cisplatin resistance in ovarian cancer cells identified by quantitative proteomics technology and integrated with mRNA expression levels. *Molecular and Cellular Proteomics*. 2006 Mar;5(3):433-443. Erratum in: *Molecular and Cellular Proteomics*. 2006 Jun; 5(6):1171.
41. Scholler N, Crawford M, Sato A, **Drescher CW**, O'Briant KC, Kiviat N, Anderson GL, Urban N. Bead-based ELISA for validation of ovarian cancer early detection markers. *Clinical Cancer Research*. 2006 Apr 1; 12(7 Pt 1):2117-24.
42. Goodell V, Salazar LG, Urban N, **Drescher CW**, Gray H, Swensen R, McIntosh MW, Disis ML. Antibody immunity to oncogenic proteins is a prognostic indicator in ovarian cancer. *Journal of Clinical Oncology*. 2006 Feb 10; 24(5):762-8.

2005 and Earlier

43. Tu SP, Chen H, Chen A, Lim J, May S, **Drescher C**. Clinical trials: Understanding and perceptions of female Chinese-American cancer patients. *Cancer*. 2005 Dec 15; 104(12 Suppl):2999-3005.
44. McIntosh MW, **Drescher C**, Karlan B, Scholler N, Urban N, Hellstrom KE, Hellstrom I. Combining CA 125 and SMR serum markers for diagnosis and early detection of ovarian carcinoma. *Gynecologic Oncology*. 2004 Oct;95(1):9-15.
45. Andersen MR, Nelson J, Peacock S, Giedzinska A, **Drescher C**, Bowen D, Urban N. Worry about ovarian cancer risk, and use of screening by high-risk women: how you recruit affects what you find. *American Journal of Medical Genetics*. 2004 Aug 30; 129(2):130-5.
46. **Drescher CW**, Nelson J, Peacock S, Andersen MR, McIntosh MW, Urban N. Compliance of average- and intermediate-risk women to semiannual ovarian cancer screening. *Cancer Epidemiology, Biomarkers & Prevention*. 2004 Apr; 13(4):600-6.
47. Hellstrom I, Raycraft J, Hayden-Ledbetter M, Ledbetter JA, Schummer M, McIntosh M, **Drescher C**, Urban N, Hellstrom KE. The HE4 (WFDC2) protein is a biomarker for ovarian carcinoma. *Cancer Research*. 2003 Jul 1; 63(13):3695-700.
48. Horowitz NS, Powell MA, **Drescher CW**, Smith MR, Atwood M, Mate TA, Peters WA. Adequate staging for uterine cancer can be performed through Pfannenstiel incisions. *Gynecologic Oncology*. 2003 Mar; 88(3):404-10.
49. Brown JV 3rd, Peters WA 3rd, Rettenmaier MA, Graham CL, Smith MR, **Drescher CW**, Micha JP. Three-consecutive-day topotecan is an active regimen for recurrent epithelial ovarian cancer. *Gynecologic Oncology*. 2003 Feb; 88(2):136-40.
50. Anderson MR, Peacock S, Nelson J, Wilson S, McIntosh M, **Drescher C**, Urban N. Worry about ovarian cancer risk and use of ovarian cancer screening by women at

- risk for ovarian cancer. *Gynecologic Oncology*. 2002 Apr; 85 (1) 3-8. (Lead article)
51. Horowitz NS, Peters WA 3rd, Smith MR, **Drescher CW**, Atwood M, Mate TP. Adjuvant high dose rate vaginal brachytherapy as treatment of stage I and II endometrial carcinoma. *Obstetrics and Gynecology*. 2002 Feb; 99(2):2335-40.
 52. Peters WA 3rd, Smith MR, **Drescher CW**. Rectal prolapse in women with other defects of pelvic floor support. *American Journal of Obstetrics and Gynecology*. 2001 Jun; 184(7):1488-94.
 53. Brown JV 3rd, Peters WA 3rd, Rettenmaier MA, Karlan BY, Dillman RA, Smith MR, **Drescher CW**, Micha JP. A phase I trial of a 3-day topotecan Q 21 days for recurrent epithelial cancers of the ovary, fallopian tube and peritoneum. *Gynecologic Oncology*. 2001 Dec; 79(3):495-8.
 54. **Drescher C**, Holt SK, Andersen MR, Anderson G, Urban N. Reported ovarian cancer screening among a population-based sample in Washington State. *Obstetrics and Gynecology* 2000 Jul 1; 98(1):70-4
 55. Schummer, M, Kiviat N, Bednarski D, Crumb GK, Ben-Dor A, **Drescher C**, Hood L. Hybridization of an array of 100,000 cDNAs with 32 tissues finds potential ovarian cancer marker genes. *International Journal of Biological Markers*, 2000, 15 suppl.1, 35
 56. Cohn DE, Peters WA 3rd, Muntz HG, Wu R, Greer BE, Tamimi HK, **Drescher CW**, Smith MR, Yon JL, Schmidt R, Goff BA. Adenocarcinoma of the uterine cervix metastatic to lymph nodes. *American Journal of Obstetrics and Gynecology*, 1998 Jun; 178(6):1131-7
 57. Swisher E, **Drescher C**. Metastatic placental site trophoblastic tumor: long-term remission in a patient treated with EMA/CO chemotherapy. *Gynecologic Oncology*, 1998 Jan; 68(1):62-5.
 58. Urban N, **Drescher C**, Etzioni R, Colby C. Use of a stochastic simulation model to identify an efficient strategy for ovarian cancer screening. *Controlled Clinical Trials*, 1997; 18:251-270.
 59. Smith MR, Peters WA, **Drescher CW**. Cisplatin, doxorubicin hydrochloride and cyclophosphamide followed by radiotherapy in high-risk endometrial carcinoma. *American Journal of Obstetrics and Gynecology*, 1994 Jun; 170(6):1677-81.
 60. **Drescher CW**, Flint A, Hopkins MP, Roberts JA. Prognostic significance of DNA content and nuclear morphology in borderline ovarian tumors. *Gynecologic Oncology*, 1993 Feb; 48(2):242-6.
 61. Reid GC, Roberts JA, Hopkins MP, Schoepfel SL, Perez-Tamayo C, **Drescher C**, Chamberlain D, Morley GW (Jun 1993) Primary treatment of stage III ovarian carcinoma with sequential chemotherapy and whole abdominal radiation therapy., *Gynecologic oncology*, 49 (3), 333-8
 62. Hopkins MP, **Drescher CW**, McQuillen A, Keyser J, Schmidt R. Malignant placental site trophoblastic tumor associated with placental abruption, fetal distress and elevated CA-125. *Gynecologic Oncology*, 1992 Nov; 47(2):267-71.
 63. **Drescher CW**, Reid, GO, Terada K, Roberts JA, Hopkins MP, Perez-Tamayo C, Schoepfel S. Continuous infusion of low dose 5 Fluoruracil and radiation therapy for poor prognostic squamous cell carcinoma of the uterine cervix. *Gynecologic Oncology*, 1992 Mar; 44(3):227-30.

64. Van Devanter DB, Yirdew G, Do C, Tyseeling K, **Drescher CW**, Forseth BJ, Von Hoff DD, McNutt MA. Preparation of uniform, intact DNA samples from resected tumor tissue for pulse-field gel electrophoretic Analysis. *BioTechniques*, 1992; 41:86.
65. **Drescher CW**, Hopkins MP, Roberts JA. A comparison of the pattern of metastatic spread of squamous and adenocarcinoma of uterine cervix. *Gynecologic Oncology*, 1989 Jun; 33(3):340-3.
66. **Drescher CW**, Elkins TE, Foster RL, Adekeo O. The incidence of urogenital chlamydia trachomatous infections among patients in Kumasi, Ghana. *International Journal of Gynecology and Obstetrics*, 1988 Dec; 27(30):381-3.
67. Elkins TE, **Drescher CW**, Martey JO, Fort D. Vesicovaginal fistula revisited. *Obstetrics and Gynecology*, 1988 Sep; 72(3Pt1):307-12.
68. Hopkins MP, **Drescher CW**, Morley GW. Claudication as a rare symptom of recurrent cervical carcinoma. *American Surgeon*, 1987 Sep; 53(9):532-3.
69. **Drescher CW**, Peters WA, Roberts JA. Contribution of endocervical curettage in evaluating abnormal cervical cytology. *Obstetrics and Gynecology*, 1983 Sep; 62(3):343-7.

Other Published Scholarly Papers

1. Urban N, **Drescher C**. Making decisions about screening for ovarian cancer - letter *British Medical Journal* 2000, April; (320), 940.
2. Urban N, McIntosh M, Clarke L, Jacobs I, Karlan B, Anderson G, **Drescher C**, Kiviat N. Socioeconomics of ovarian cancer screening. In Sharp F, Blackett A, Berek J, Bast R, eds. Ovarian cancer 6. Oxford: Isis Medical Media 2000.
3. Urban N, **Drescher C**, Clarke L, Kiviat N. Cost effectiveness analysis of ovarian cancer screening strategies. In Sharp F, Blackett A, Berek J, Bast R, eds. Ovarian cancer 5. Oxford: Isis Medical Media, 1998.
4. **Drescher CW**. Prognostic Significance of DNA ploidy in borderline ovarian tumors. *Contemporary OB/ Gyn* 49:9 (1995).
5. Elkins TE, **Drescher CW**, Martey JO. Cesarean section in developing countries. In: Cesarean Section. J. Phelan, Editor. Willims and Wilkins. 1989.

Invited Talks

1. Ovarian Cancer- Progress through Collaborative Research. Women's Wellness Luncheon, Seattle WA, September 2010
2. Society of Gynecologic Oncology Annual Meeting on Women's Cancers, Translational Research: From Bench to Bedside, San Francisco, California, March 2010
3. Providence Everett Medical Center Division of Obstetrics and Gynecology, Endometrial Cancer - A Common Yet Challenging Problem, February 2010
4. Washington State Obstetrical Society Annual Meeting, Biomarkers for Ovarian Cancer Detection and Diagnosis, Seattle, Washington, November 2009

5. Personalized Gynecologic Cancer Care: Moving from Disease to Patient, Society of Gynecological Oncologists, State of the Art Conference, Washington D.C., November 2009
6. Biomarkers for Ovarian Cancer Diagnosis and Detection, Washington State Obstetrical Association Annual Meeting, Seattle, Washington, December 2009
7. Ovarian Cancer Molecular Diagnostics, Cancer Biology Symposium University of Puget Sound, Tacoma, Washington, December 2009
8. Early Ovarian Cancer Symposium, USC/Norris Comprehensive Cancer Center, Los Angeles, California, June 2009
9. Canary Foundation Early Detection Research Symposium, Stanford, California March 2009
10. Marsha Rivkin Center 7th Biennial Ovarian Cancer Research Symposium, Seattle, Washington, September 2008
11. Genomics and proteomics – post graduate course -Society of Gynecological Oncologists 34th Annual Meeting, San Diego, California. February 2004
12. Genomics and proteomics for the Early Detection of Ovarian Cancer- post graduate course– Society of Gynecological Oncologists 33rd Annual Meeting, New Orleans, Louisiana, February, 2003
13. "Evaluation of pelvic masses" Washington State Obstetrics and Gynecology Annual Meeting Seattle, 1998
14. "Management of abnormal pap smears" Washington State Obstetrics and Gynecology Annual Meeting Seattle, 1994
15. "Ovarian cancer-a clinical perspective" Pacific Northwest Diagnostic Ultrasound Symposium, Seattle, 1992
16. "Borderline ovarian tumors" Seattle Gynecological Society, 1990

Presentations and Posters

1. **Drescher CW**, Urban N, Hartge P, Berg CD. Potential role of HE4 in multimodal screening for epithelial ovarian cancer. International Conference on Ovarian Cancer Screening, London, United Kingdom, November 29-30, 2011.
2. **Drescher CW**. Poster presentation; Impact of screening test performance and cost on mortality reduction and cost-effectiveness of ovarian cancer screening. NCI Translational Science Meeting, Washington, D.C., July 28-29, 2011.
3. Shah C, Gough S, Thorpe J, Hager S, Bergan L, Gaul M, Paley P, O'Briant K, Anderson G, McIntosh M, Urban N, **Drescher CW**. Poster presentation of a prospective screening trial in women at increased risk of ovarian cancer utilizing the Parametric Empiric Bayes (PEB) algorithm. Marsha Rivkin Center Research Symposium for Ovarian Cancer, Seattle, Washington, October 2010.

4. Shah C, Gough S, Thorpe J, Hager S, Bergan L, Gaul M, Paley P, O'Briant K, Anderson G, McIntosh M, Urban N, **Drescher CW**. Results of a prospective screening trial in women at increased risk of ovarian cancer utilizing the Parametric Empiric Bayes (PEB) algorithm. SGO Annual Meeting on Women's Cancer – Focused Plenary Session on Ovarian Cancer. San Francisco, California, March 2010.
5. **Drescher CW**. Represented the POCRC SPORE in Ovarian Cancer for Nicole Urban at the NCI Translational Science Meeting, Washington, D.C., November 5, 2009.
6. **Drescher CW**. Review Panel Member. Robert F. Ozols Symposium on GYN Cancer, Fox Chase Cancer Center, Philadelphia, PA, September 25, 2009.
7. Brown JV III, Peters WA III, Rettenmaier MA, **Drescher CW**, Smith MR, Dillman RA, Micha JP. Three consecutive day topotecan is an active regimen for recurrent epithelial ovarian caners, 33rd Annual Meeting SGO, March 17, 2002.
8. Horowitz NS, Powell MA, **Drescher CW**, Smith MR, Atwood M, Mate TA, Peters WA III. Adequate staging for uterine cancer can be performed through pfannenstiell incisions. 33rd Annual Meeting SGO, March 17, 2002.
9. Anderson G, **Drescher C**, Urban N. Ovarian cancer screening, new perspectives 8th Annual SPORE Workshop, Chantilly Va. July 11, 2000.
10. Wahl R. Robert, Hopkins M, **Drescher CW**, Fig L, Mallatia B, Mudgett E, Folsie D, Schroff R, Abrams P, Fer M Wilbur S, PHASE I Evaluation of I-131 Labeled Anti-Ovarian Carcinoma Antibody. Presented at Society of Nuclear Medicine, 87th Annual Meeting, May 19, 1990.
11. **Drescher CW**, Hopkins, AM, Roberts JA, Quantitative DNA and Cell Morphometric Evaluation of Ovarian tumors of Low Malignant Potential. Presented at Western Association of Gynecologic Oncologists Annual Meeting. 1990.
12. **Drescher CW**, Foster RL, Elkins TE. The Incidence of Urogenital Chlamydia Trachomatous Infection among Patients in Kumasi, Ghana. Presented at The Fourth World Conference of Infectious Diseases and Human Infertility, March 1987.
13. Ayers JWT, **Drescher CW**, Randolph JF. Abnormal Gonadotrophin Pulse Frequency Alterations Induced by Clomiphine Citrate in older women. Presented at American Fertility Society 43rd Annual Meeting, 1987.
14. **Drescher CW**, Lucchesi BR. An In Vivo Model for development of Intraluminal Coronary Artery Thrombosis in Dogs. Presented at the Midwest Medical Student Research Forum. 1974. Award: Second Place Paper.

Currently Funded Research

National Institutes of Health/National Cancer Institute, U01 CA152637-02
 "Breast and Ovary Cancer Clinical Validation Center"
 P.I.: Christopher Li, MD, PhD
 Time/Effort: 0.36 calendar months, 3% Effort
 Annual Direct Cost: \$468,964
 Period of Support: 08/16/10 – 06/30/15
 Position on Project: Co-Investigator

Department of Defense/US Army Medical Research & Devel. Command, W81XWH-10-1-0422

“Targeting Cell Surface Proteins in Molecular Photoacoustic Imaging to Detect Ovarian Cancer Early”

P.I.: Charles W. Drescher, MD

Time/Effort: 1.2 Calendar months, 10% Effort

Annual Direct Cost: \$133,177

Period of Support: 07/01/10 – 06/30/12*

Position on Project: Principal Investigator

*NCE request anticipated

National Institutes of Health/National Cancer Institute, P50 CA083636

Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer

P.I.: Nicole Urban, ScD

Leadership and Administration Cores

Director: Nicole Urban, ScD

Time/Effort: 0.6 Calendar Months, 5% FTE Concurrent with Project 2

Annual Direct Costs: \$74,171

Period of Support: 09/30/04 – 06/30/14

Position on Project: Co-Leader

National Institutes of Health/National Cancer Institute, P50 CA083636

Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer

P.I.: Nicole Urban, ScD

Clinical Core

Director: Charles W. Drescher, MD

Time/Effort: 1.08 Calendar Months, 9% FTE

Annual Direct Costs: \$128,727

Period of Support: 09/30/04 – 06/30/14

Position on Core: Director

National Institutes of Health/National Cancer Institute, P50 CA083636

Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer

P.I.: Nicole Urban, ScD

“Novel Markers Trial” (Project 1)

Investigator: Charles W. Drescher, MD

Time/Effort: 0.60 Calendar Months, 5% FTE

Annual Direct Costs: \$91,991

Period of Support: 08/21/09 – 06/30/14

Position on Project: Investigator

National Institutes of Health/National Cancer Institute, P50 CA083636

Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer

P.I.: Nicole Urban, ScD

“Targeted Microbubble Contrast-Enhanced Ultrasound Imaging of the Ovarian Cancer Vascular Network for Early Detection” (Project 2)

Co-Leader: Charles W. Drescher, MD

Time/Effort: 1.08 Calendar Months, 9% FTE

Annual Direct Costs: \$179,721

Period of Support: 08/21/09 – 06/30/14

Position on Project: Project Co-Leader

National Institutes of Health/National Cancer Institute, P50 CA083636
Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer
P.I.: Nicole Urban, ScD
“miRNA Signature for Poorly Resectable Ovarian Cancer” (Project 3)
Co-Leader: Charles W. Drescher, MD
Time/Effort: 0.6 Calendar Months, 5% FTE Concurrent effort with Clinical Core
Annual Direct Costs: \$137,488
Period of Support: 08/21/09 – 06/30/14
Position on Project: Project Co-Leader

National Institutes of Health/National Cancer Institute, P50 CA083636
Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer
P.I.: Nicole Urban, ScD
“Clinical Implications of the Acquisition of BRCA 1/2 Function in BRCA 1/2- Deficient Ovarian Carcinoma” (Project 4)
Investigator: Charles W. Drescher, MD
Time/Effort: 0.36 Calendar Months, 3% FTE Concurrent effort with Clinical Core
Annual Direct Costs: \$148,058
Period of Support: 08/21/09 – 06/30/14
Position on Project: Investigator

Previously Funded Research

Illumina, Inc
“p53 Gene Molecular Pathology”
P.I.: Charles W. Drescher
Time/Effort: 0.12 calendar months, 1% effort
Contract Direct Costs: \$13,070
Period of Support: 10/01/10 – 12/16/11

Canary Foundation
“Development of a Blood-Based Assay for the Early Detection of Ovarian Cancer”
P.I.: Charles W. Drescher, MD
Time/Effort: Contributed
Annual Direct Costs: \$127,841
Period of Support: 12/01/07-12/31/10

National Institutes of Health/National Cancer Institute, P50 CA083636
SPORE Ovarian Cancer Research Program
Inter-SPORE Supplement: “Proteomics Remission Monitoring Trial”
P.I.: Charles W. Drescher, MD
Time/Effort: 0.5%
Annual Direct Costs: \$123,198
Period of Support: 09/30/04-06/30/10
Position on Project: Principal Investigator

Canary Foundation
“Validation of ovarian cancer tumor vascular markers”

P.I.: Charles W. Drescher, MD
Time/Effort: Contributed
Annual Direct Costs: \$22,926
Period of Support: 02/01/08-01/31/10

Marsha Rivkin Center for Ovarian Cancer Research
"Use of Counter-Indicated CAM Treatments by Ovarian Cancer Patients"
P.I.: Robyn Andersen, PhD
Proposal Project Dates: 05/01/09 – 04/30/10
Time/Effort: Contributed
Annual Direct Costs: \$75,000
Position on Project: Other Significant Contributor, Gynecologic Oncologist

Centers for Disease Control, 1R18DP001142-01
"Prevention of Ovarian Cancer in Women Participating in Mammography"
P.I.: Nicole Urban, ScD
Proposal Project Dates: 09/30/07 – 09/29/09
Annual Direct Costs: \$319,248
Position on Project: Gynecologic Oncologist

National Institutes of Health/National Cancer Institute, P50 CA083636
Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer
Inter-SPORE Supplement: "A Phase II Trial of Intraperitoneal Paclitaxel and
Carboplatin with IV Bevacizumab Therapy in the Treatment of Women with Newly
Diagnosed, Optimally Cytoreduced Carcinoma of Müllerian Origin"
P.I.: Charles W. Drescher, MD
Time/Effort: 2%
Annual Direct Costs: \$174,513
Period of Support: 07/01/07-06/30/09
Position on Project: Principal Investigator

National Institutes of Health/National Cancer Institute, P50 CA083636
Pacific Ovarian Cancer Research Consortium: SPORE in Ovarian Cancer
"Molecular Targets for Prognosis and Therapy" (Project 4)
P.I.: Lee Hood, PhD
Time/Effort: 5%
Annual Direct Costs: \$246,700
Period of Support: 09/30/04-06/30/09
Position on Project: Co- Principal Investigator

National Institutes of Health/National Cancer Institute, R01 CA96976
"Modeling Ovarian Cancer Screening for CEA"
P.I. Nicole Urban, ScD
Time/Effort: 5%
Annual Direct Costs \$166,250
Period of Support: 07/01/02-06/30/06
No-cost extension through 06/30/07
Position on Project: Co-Investigator

Bristol-Myers Squibb

“A Phase II Trial of Single Agent Cetuximab Dose Escalated to Rash in Patients with Persistent or Recurrent Epithelial Ovarian or Primary Peritoneal Carcinoma”
P.I.: Charles W. Drescher, MD
Period of Support: 01/01/05-08/03/06
Position on Project: Principal Investigator

National Institutes of Health/National Cancer Institute, P50 CA083636
SPORE Ovarian Cancer Research Program
Pacific Ovarian Cancer Research Consortium, Developmental Research Project,
“Identification of a transcriptional signature of AKT activation in ovarian cancer”
P.I.: Charles W. Drescher, MD
Time/Effort: 5%
Annual Direct Costs: \$28,662
Period of Support: 08/15/05-08/14/06
Position on Project: Principal Investigator

National Institutes of Health/National Cancer Institute, P50 CA083636
"Clinical Core- Pacific Ovarian Cancer Research Consortium", SPORE Ovarian Cancer
Research Program
P.I.: Charles W. Drescher, MD
Time/Effort: 10%
Annual Direct Costs: \$196,489
Period of Support: 10/01/99-10/01/04
Position on Core: Director

National Institutes of Health/National Cancer Institute, P50 CA083636
SPORE Ovarian Cancer Research Program
"Genes Associated with Chemoresponsiveness in Ovarian Cancer"
P.I.: Leroy Hood, PhD
Time/Effort: 10%
Annual Direct Costs: \$162,280
Period of Support: 10/01/99-10/01/04
Position on Project: Co- Investigator

National Institutes of Health/National Cancer Institute, P50 CA083636
“Collaborative Research on Ovarian Cancer Screening and Chemoprevention”,
SPORE Ovarian Cancer Research Program/ Inter-SPORE Supplement
P.I.: Nicole Urban, ScD
Time/Effort: 7%
Annual Direct Costs \$106,801
Period of Support: 10/01/99-10/01/04
Position on Project: Inter-SPORE Supplement Principal Investigator

National Institutes of Health/National Cancer Institute, P50 CA083636
"Improving Quality of Life for Women with Ovarian Cancer" SPORE Ovarian Cancer
Research Program
P.I.: Robyn Andersen, PhD
Time/Effort: 5%
Annual Direct Costs \$191,023
Period of Support: 10/01/99-10/01/04
Position on Project: Co- Investigator

National Institutes of Health/National Cancer Institute, U24 CA78164
"CGN Ovarian Cancer Screening Pilot Trial in High Risk Women", Northwest Cancer
Genetics Network
P.I.: Deborah Bowen, PhD
Time/Effort: 7%
Annual Direct Costs \$104,643
Period of Support: 09/01/01 - 08/31/04
Position on Project: Co-Investigator, Gynecologic Oncologist

National Institutes of Health/National Cancer Institute, P50 CA083636
"Promoting Research Participation Among Chinese American Women", SPORE in
Ovarian Cancer
P.I.: Charles W. Drescher, MD
Time/Effort: 5%
Annual Direct Costs: \$178,722
Period of Support: 09/01/00-08/31/02
Position on Project: Principal Investigator

National Institutes of Health/National Cancer Institute, R01 CA75494-01
"Quality of Life Effects of Risk Education and Screening for Ovarian Cancer"
P.I.: Nicole Urban, ScD
Time/Effort: 15%
Annual Direct Cost: \$494,297
Period of Support: 09/01/97-08/30/01, No-Cost Extension through 08/30/02
Position on Project: Co- Investigator

DOD/US Army Medical Research and Materiel Command, DAMD17-98-1-8649
"Use of Novel Technologies to Identify and Investigate Molecular Markers for
Ovarian Cancer Screening and Prevention"
P.I.: Nicole Urban, ScD
Time/Effort: 10%
Annual Direct Cost: \$854,545
Period of Support: 10/01/98-09/30/00, No-Cost Extension 10/01/00-10/30/01
Position on Project: Co- Investigator, Gynecologic Oncologist

National Institutes of Health/National Cancer Institute, NO1-CN-65034-29
"A Model for Assessing Cost-Effectiveness of Ovarian Screening"
Supplement to SEER Contract,
P.I.: David Thomas
Time/Effort: 5%
Annual Direct Cost: \$79,965
Period of Support: 09/30/96-09/29/97
Position on Project: Consultant

Pending Research

PA-11-260: Research Project Grant (Parent R01)
"Deep sequencing of tumor infiltrating lymphocytes as a prognostic measure for
ovarian cancer"

P.I.: Harlan Robins, PhD
Time/Effort: 1.2 Calendar Months, 10% FTE
Initial Direct Costs: \$250,000
Period of Support: 12/01/12 - 11/30/17
Position on Project: Gynecologic Oncologist

National Institutes of Health/National Cancer Institute, GRANT11056690
"Risk-based ovarian cancer prevention by salpingectomy and salpingo-
oophorectomy"
P.I.: Charles W. Drescher
Time/Effort: 2.4 Calendar Months, 20% FTE
Initial Direct Costs: \$250,000
Period of Support: 12/01/2012-11/30/2016