

Curriculum Vitae - Nancy J. Phillips, M.D.

Personal History: Date and place of birth: 9/8/56, New York, New York, USA. U.S. citizen

Education:

1977 B.A. Mount Holyoke College, South Hadley, MA
1984 M.D. Medical College of Ohio, Toledo, OH

Postgraduate training and employment:

1997-present Associate Professor, Department of Pathology, St. Louis University School of Medicine, St. Louis, MO; staff pathologist, St. Louis University Hospital
1990-1996 Assistant Professor, Department of Pathology, St. Louis University School of Medicine, St. Louis, MO; staff pathologist, St. Louis University Hospital
1989-1990 Instructor, Gynecologic Pathology, Washington University School of Medicine, St. Louis, MO (non-ACGME-accredited fellowship; this subspecialty does not have ACGME recognition)
1988-1989 Assistant, Gynecologic Pathology, Division of Surgical Pathology, Department of Pathology, Washington University School of Medicine, St. Louis, MO (non-ACGME-accredited fellowship; this subspecialty does not have ACGME recognition)
1987-1988 Resident, Surgical Pathology, Department of Pathology, Washington University School of Medicine, St. Louis, MO
1985-1987 Postdoctoral fellow, Dr. Joseph M. Davie, Department of Microbiology and Immunology, Washington University School of Medicine, St. Louis, MO
1984-1985 Resident, Anatomic Pathology, Department of Pathology, Washington University School of Medicine, St. Louis, MO
1977-1980 Research assistant, Division of Cell Biology, Children's Hospital Research Foundation, Cincinnati, OH

Certification, licensure, hospital staff privileges:

1988-present Missouri license R8H53
1988 Certification in Anatomic Pathology, American Board of Pathology (lifetime)
1990-present Saint Louis University Hospital
2019-present Saint Mary's Hospital, St. Louis

Awards:

1983 Alpha Omega Alpha Honor Medical Society, Medical College of Ohio
1984 Pathology Award, Microbiology and Immunology Award, Medical College of Ohio
1984 Excellence in Academic Achievement Award, American Medical Women's Association, Medical College of Ohio

1985-1987 NIH T32 AI071613-09 training grant for postdoctoral fellowship in lab of
 J. M. Davie
1998, 2010, 2019 St. Louis University Pathology Residents' Teaching Award
2013-2019, 2025 "St. Louis Best Doctors" list

Grants held as principal investigator: See section V, Research.

Professional Societies:

American Society for Human Genetics (inactive)
American Association for Cancer Research (inactive)
U.S. and Canadian Academy of Pathology

I. Bibliography

Refereed Articles

1. Wee, E., **Phillips, N.**, Babiarz, B., Zimmerman, E. Palate morphogenesis: effects of cholinergic agonists and antagonists on palate rotation in embryo culture. J. Embryol. Exp. Morph. 58: 177-193, 1980.
2. Zimmerman, E., Wee, E., **Phillips, N.**, Roberts, N. Presence of serotonin in the palate just prior to shelf elevation. J. Embryol. Exp. Morph. 64: 233-250, 1981.
3. **Phillips, N.J.**, and Davie, J.M. Idiotope structure and genetic diversity in anti-streptococcal group A carbohydrate antibodies. J. Immunol. 145:915-925, 1990.
4. Gersell, D.J., **Phillips, N.J.**, and Beckerman, K. Chronic chorioamnionitis: a clinicopathologic study of 17 cases. Int. J. Gynecol. Pathol. 10: 217-219, 1991.
5. Stanley, S.L., Foster, L., **Phillips, N.J.** Molecular analysis of carbohydrate antigen-induced monoclonal IgM anti-IgG antibodies (rheumatoid factors). Molec. Immunol. 29: 453-461, 1992.
6. **Phillips, N.J.**, Ziegler, M.R., Saha, B.K., Xynos, F.P. Allelic loss on chromosome 17 in human ovarian cancer. Int. J. Cancer 54 : 85-91, 1993.
7. Radford, D.M., Fair, K.L., **Phillips, N.J.**, Ritter, J.H., Steinbrueck, T., Holt, M.S., and Donis-Keller, H. Allelotyping of ductal carcinoma-in-situ (DCIS) of the breast: deletion of loci on 8p, 13q, 16q, 17p, and 17q. Cancer Res. 55: 3399-3406, 1995.
8. Radford, D.M., **Phillips, N.J.**, Fair, K.L., Ritter, J.H., Holt, M., Donis-Keller, H. Allelic loss and the progression of breast cancer. Cancer Res. 55: 5180-5183, 1995.
9. Radford, D.M., Holt, M.S., Ritter, J.H., **Phillips, N.J.**, Fair, K.L., DeSchryver, K., Schuh, M.E., and Donis-Keller, H.R. Allelic loss on chromosome 8p occurs early in the development of breast carcinoma. Surgical Forum 46: 553-555, 1995.
10. **Phillips, N.J.**, Ziegler, M.R., Radford, D.R., Fair, K.L., Steinbrueck, T., Xynos, F.P., Donis-Keller, H. Allelic deletion on chromosome 17p13.3 in early ovarian cancer. Cancer Res. 56: 606- 611, 1996.
11. **Phillips, N.J.**, Ziegler, M.R., Deaven, L.L. A cDNA from the ovarian cancer critical region of deletion on chromosome 17p13.3. Cancer Letters 102: 85-90, 1996.
12. Poulos, J., Presti, M., **Phillips, N.J.**, Longo, W. Lymphatic Cyst of the Colon. Dis. Colon and Rectum 40: 366-369, 1997.

13. Neuschwander-Tetri, B., Ramrakhiani, S., Isley, W., Oki, J., Quiason, S., **Phillips, N.**, Brunt, E. Troglitazone-induced Hepatic Failure. Annals Internal Med. 129: 38-41, 1998.
14. Wang, JC, Radford, DM, Holt, MS, Helms, C, Goate, A, Brandt, W, Parik, M, **Phillips, NJ**, DeSchryver, K, Schuh, ME, Fair, KL, Ritter, JH, Marshall, P, Donis-Keller, H. Sequence-ready contig for the 1.4-cM ductal carcinoma in situ loss of heterozygosity region on chromosome 8p22-p23. Genomics. 60:1-11, 1999.
15. Majumder M., Ghosh AK., Steele R., Zhou XY., **Phillips NJ.**, Ray R., Ray RB. Hepatitis C virus NS5A protein impairs TNF-mediated hepatic apoptosis, but not by an anti-FAS antibody, in transgenic mice. Virology. 294: 94-105, 2002.
16. Kelemen PR., Lowe V., **Phillips N.** Positron emission tomography and sentinel lymph node dissection in breast cancer. Clinical Breast Cancer. 3: 73-7, 2002.
17. Alahdab MT, Alvarez Aquino FG, **Phillips NJ**, Hauptman P. Malignant Fibrous Histiocytoma of the Lung Presenting as Bronchial Obstruction in a Heart Transplant Recipient. J. Heart Lung Transpl. 21:1140-1143, 2002.
18. Majumder M. Steele R. Ghosh AK. Zhou XY. Thornburg L. Ray R. **Phillips NJ.** Ray RB. Expression of hepatitis C virus non-structural 5A protein in the liver of transgenic mice. FEBS Letters. 555: 528-532, 2003.
19. Thudi KR, Kreikemeier JT, **Phillips NJ**, Salvalaggio PR, Kennedy DJ, Hayashi PH. Cat scratch disease causing hepatic masses after liver transplant. Liver International 27: 145-148, 2007.
20. Buekers TE, Kao MS, **Phillips NJ**, Xynos FP. Treatment of early-stage cervical cancer: an assessment of preoperative factors. Gynecol. Oncol. 104 (3): 665-669, 2007 (epub 2006 Nov. 16).
21. Collins BT, **Phillips NJ**, Hsueh EC. Fine needle aspiration biopsy of splenic hamartoma with bizarre stromal cells: a case report. Acta Cytol. 52: 347-350, 2008.
22. Hsu HY, **Phillips NJ**, Smith M. Secondary Amyloidosis in The Hydrops Lesion of A Patient with Pellucid Marginal Degeneration. Cornea. 26(8):992-994, 2007.
23. Thomas MA, Spencer JF, Toth K, Sagartz JE, **Phillips NJ**, Wold WS. Immunosuppression enhances oncolytic adenovirus replication and antitumor efficacy in the Syrian hamster model. Mol Ther. 2008 Oct;16(10):1665-73. Epub 2008 Jul 29.
24. Ru P, Steele R, Nerurkar PV, **Phillips N**, Ray RB. Bitter melon extract impairs prostate cancer cell-cycle progression and delays prostatic intraepithelial neoplasia in TRAMP model. Cancer Prev Res (Phila). 2011 Dec;4(12):2122-30. doi: 10.1158/1940-6207.CAPR-11-0376. Epub 2011 Sep 12. PubMed PMID: 21911444; PubMed Central PMCID: PMC3232292.
25. Ru P, Steele R, Newhall P, **Phillips NJ**, Toth K, Ray RB. miRNA-29b suppresses prostate cancer metastasis by regulating epithelial-mesenchymal transition signaling. Mol Cancer Ther. 2012 May;11(5):1166-73. doi: 10.1158/1535-7163.MCT-12-0100. Epub 2012 Mar 8. PubMed PMID: 22402125.
26. Davis AT, Guo AM, **Phillips NJ**, Greenberg DD. A novel treatment for bone lesions of multifocal epithelioid sarcoma-like hemangioendothelioma. Skeletal Radiol. 2015 Jul;44(7):1013-9. doi: 10.1007/s00256-014-2089-x. Epub 2015 Jan 8. PubMed PMID: 25564226.
27. Grace S, Muzaffar R, Veerapong J, Alkaade S, Poddar N, **Phillips N**, Guzman M, Batanian J, Vogler C, Lai JP. Synchronous quadruple primary neoplasms: glioblastoma, neuroendocrine tumor, schwannoma and sessile serrated adenoma in a

patient with history of prostate cancer. Anticancer Res. 2015 Apr;35(4):2121-7. PubMed PMID: 25862868.

28. Dinarvand P, Vareedayah AA, **Phillips NJ**, Hachem C, Lai JP. Gastric heterotopia in rectum: a literature review and its diagnostic pitfall. SAGE Open Med Case Rep. 2017 Feb 17;5: 2050313X17693968. doi: 10.1177/2050313X17693968

29. Muhammad N, Bhattacharya S, Steele R, **Phillips N**, Ray RB. Involvement of c-Fos in the Promotion of Cancer Stem-like Cell Properties in Head and Neck Squamous Cell Carcinoma. Clin. Cancer Res. 2017 June 15; 23 (12): 3120-3128, PMID 27965308

30. Dinarvand P, Davaro EP, Doan JV, Ising ME, Evans NR, **Phillips NJ**, Lai J, Guzman MA. Familial Adenomatous Polyposis Syndrome: An Update and Review of Extraintestinal Manifestations. Arch Pathol Lab Med. 2019 Nov;143(11):1382-1398. doi: 10.5858/arpa.2018-0570-RA.

31. Nazzal M, Sur S, Steele R, Khatun M, Patra T, **Phillips N**, Long J, Ray R, Ray RB. Establishment of a Patient-Derived Xenograft Tumor from Hepatitis C-Associated Liver Cancer and Evaluation of Imatinib Treatment Efficacy. Hepatology. 2020 Aug;72(2):379-388. doi: 10.1002/hep.31298

32. Abate G, Meza KA, Colbert CG, Ramos-Espinosa O, **Phillips NJ**, Eickhoff CS. Immunity Against *Mycobacterium avium* Induced by DAR-901 and BCG. Vaccines (Basel). 2025 Jun 7;13(6):619. doi: 10.3390/vaccines13060619. PMID: 40573950; PMCID: PMC12197784.

33. Vest LS, Ahmad A, Valasareddy S, **Phillips N**, Kilian A. Giant Cell Arteritis Refractory to Interleukin-6 and Interleukin-17 Inhibition Treated With Upadacitinib. ACR Open Rheumatol. 2025 Aug;7(8): e70094. doi: 10.1002/acr2.70094. PMID: 40728090; PMCID: PMC12305451.

Abstracts:

- 1. Phillips, N.J.,** Lutz, C.T., Davie, J.M. Localization of a public idiotope in the anti-streptococcal group A carbohydrate response. Fed. Proc. 46: 487, 1987 (FASEB 1987, presented by **NJP** as poster and published as article #3 above).
- Ziegler, M., Xynos, F., Gersell, D., **Phillips, N.** Loss of heterozygosity on chromosome 17 in human ovarian carcinoma. Genetics and Molecular Biology of Breast Cancer (Cancer Cells 9): 83A, Cold Spring Harbor Laboratory, 1992 (presented by **NJP** as poster and published as article #6 above)
- Phillips, N.J.,** Ziegler, M.R., Radford, D.M., Xynos, F.P. Allelic loss on chromosome 17p13.3 in early ovarian cancer. Am. J. Hum. Genet. 53: 53A, 1993 (presented by **NJP** as poster at 1993 Am. Soc. Human Genetics annual meeting and published as article #10 above).
- Radford, D.M., Fair, K., Ritter, J.H., **Phillips, N.,** Thompson, A.M., Steinbrueck, T., Holt, M., Wallace, M., Wells, S.A., Donis-Keller, H. Chromosomal regions implicated in the development of breast cancer. Surgical Forum 1993. (presented by DMR as talk at 1993 Am. College of Surgeons annual meeting and published as part of article #7 above).
- Radford, D.M., Fair, K., Ritter, J., **Phillips, N.,** Donis-Keller, H. Allelotyping of ductal carcinoma-in-situ (DCIS) of the breast. Proc. Am. Assoc. Cancer Res. 35: 572, 1994 (presented by DMR and published as part of article #7 above).
- Radford, D.M., Fair, K., Ritter, J., **Phillips, N.,** Donis-Keller, H. Evidence for the early involvement of a tumor suppressor gene on 16q in the development of breast cancer. Soc.

Surgical Oncology 47: 109A, 1994 (presented by DMR as talk and published as part of article #7 above).

7. Radford, D.M., Fair, K., **Phillips, N.**, Donis-Keller, H. Chronology of genetic changes in the progression of breast cancer. Proc. Am. Soc. Clin. Oncol. 13: 127, 1994 (presented by DMR and published as article #8 above).

8. **Phillips, N.J.**, Ziegler, M.R. Infrequent HIC-1 germline mutations in ovarian carcinomas. Cancer Genetics and Tumor Suppressor Genes 2: 217A, Cold Spring Harbor Laboratory, 1996 (presented as poster, manuscript in preparation #1 above).

9. Heiberg, E.V., Perman, W.H., **Phillips, N.J.**, Herrmann, V. Dynamic 3D half-Fourier contrast-enhanced MRI of both breasts and axilla in evaluating patients with suspected breast cancer. International Magnetom Vision User Conference 2, Rotterdam, 1997 (presented by EVH).

10. **Phillips, N.J.**, Ziegler, M.R. DPH2L1, positional candidate for an ovarian carcinoma tumor suppressor gene, lacks mutations. Cancer Genetics and Tumor Suppressor Genes 4: 182A, Cold Spring Harbor Laboratory, 1998 (presented as poster, manuscript in preparation #2 above).

11. **Phillips NJ**, Ziegler MR, Bartuski A, Manepalli A. Physical and transcriptional map for the ovarian carcinoma loss of heterozygosity region on chromosome 17p13.3. Cancer Genetics and Tumor Suppressor Genes 6: 146, Cold Spring Harbor Laboratory, 2000 (presented as poster).

Research presentations:

I. Invited research presentations at other institutions (excluding abstract presentations):

- 1987 Washington University, St. Louis, Immunology Seminar - "Idiotope Structure and Genetic Diversity in Anti-streptococcal Group A Carbohydrate Antibodies"
- 1994 Washington University, St. Louis, Tumor Genetics Group Seminar - "Allelic Deletion on Chromosome 17p13.3 in Early Ovarian Cancer"
- 1994 Washington University, St. Louis, Surgical Research Seminar - "Allelic Deletion on Chromosome 17p13.3 in Early Ovarian Cancer"
- 1995 Washington University, St. Louis, Surgical Research Seminar - "Cloning of candidate tumor suppressor genes on 17p13.3 in the ovarian cancer region of deletion"

II. Research presentations at St. Louis University:

1991 - 2001 Pathology - yearly presentation of own ovarian cancer research.

2006 Pathology – Expression analysis of candidate tumor suppressor gene KIAA1401

II. Teaching:

Graduate School:

A. Student supervision: Jialing Dai, 12/95-3/96 laboratory rotation, Xiao-shu Wan, 9/96-12/96 laboratory rotation, Allison Bartuski, 2/99-7/99 part-time lab. rotation (M.D.-Ph.D. student), Laurice Fischer, summer 2001 (M.D. student research elective), Dave Barrett MS1, summer 2003, Patrick Navolanic MS1, summer 2006.

B. Dissertation committee: Jeannette Loutsch, Ph.D. Experimental Pathology 8/96

C. Journal clubs: Pathology, one presentation/ year (ceased in 2020); Liver Center, one presentation/ year (ceased in 2010)

Medical School preclinical courses:

- 1991-1992 MS2 curriculum: 1. “special studies” (immunostain, electron microscopy, DNA diagnostics, flow cytometry) methodology in anatomic pathology (one hour lecture) 2. Pathology of the Ovary and Fallopian Tube (one hour lecture)
- 2001 MS1 clinical genetics small-group tutorials (6 three hour long sessions) (this format dropped in subsequent years)
- 1990-2005 MS1 curriculum: staff gross and microscopic general pathology labs. MS2 curriculum: organize and staff four hours of gynecologic gross/ slide lab. and two hours of CPC sets
- 1998-2005 MS2 curriculum: Pathology of Benign and Malignant Breast Disease (2 one hour long lectures, 3 problem-based learning cases (migrated online), 1 four hour long gross/ slide lab) (plus gynecologic gross/ slide labs. mentioned above)
- 2007-present MS2 curriculum: one to two lectures per year, formerly “endocrine”, currently “male genitourinary”

Undergraduate and high school summer student lab. rotations

1999, Ambarish Manepalli (high school student, summer); 2001, Ebony Tidwell, SLU undergraduate, 1 semester.

Clinical teaching:

A. Supervision of pathology residents, post-sophomore fellows, and medical students in the performance of surgical and autopsy pathology clinical service (prosection, microscopy section review, report preparation, case presentation preparation). All cases have residents involved.

B. Gynecologic and breast pathology senior resident elective: Offered 2004 through 2009, 13 upper-level residents, 1 month length rotations.

C. Pathology residency program didactic presentations (ceased in 2024, with closure of the program):

1. Normal histology review: 2008 to 2024, as requested

2. “unknowns” case conferences (glass slides or Kodachromes provided to residents before the conference): 1991 to 2007, average two to three 90 minute conferences per year on various topics, organized and presented without resident; 2007 to 2024, average three to five 1 hour “Specialty” conferences per year in collaboration with single presenting resident per conference; Specialty topics have included breast, gynecologic, male genitourinary, bone and soft tissue, liver, lung tumors, medical lung, endocrine – most areas other than hematopathology, neuropathology, cytology

3. Tumor marker and tumor genetics lectures:

- A. "Breast cancer marker studies", 1 hour, 1997, revised 1999, 2002, 2004, 2006, for pathology residents/ faculty, and abbreviated version for medical oncology fellows.
- B. "Genetic testing for breast cancer susceptibility", 1 hour, 1998, for pathology residents/ faculty, also repeated for internal medicine residents/ faculty and, with emphasis on ovarian carcinoma risk, to obstetrics and gynecology residents/ faculty.
4. Miscellaneous resident didactic sessions: "General surgical pathology board review", 6 hours/year, 2001 to present; "Gestational trophoblastic disease", 1 hour, 2001; "Breast pathology review", 4 hours, 2001; "Gynecologic pathology review", 3 hours, 2002, "Atypical duct hyperplasia vs. low-grade DCIS – a participatory replay of the Rosai and Schnitt papers", 1 hour, 2003, 2006; *more since 2007, didn't keep track of titles (ceased in 2024)*
5. Frozen section "unknowns" case conferences: 1 hour/year to 2000; 2 hours/year, 2001-2019; 4 to 7 hours/year, 2020-2024 (once a month, skipping July and with occasional "guest" neuropathology FS conference by Dr. Guzman).
6. Joint Internal Medicine/Pathology Clinicopathologic Conference: 1 hour/year
7. Participation in weekly gross and microscopic pathology "unknowns" case conferences, autopsy conferences, pertinent clinical pathology conferences (ceased in 2024)

D. Interdepartmental clinical case conference presentations (multi-specialty tumor boards):

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| 1. 1990 – 2007 | Gynecologic Oncology Tumor Board, weekly |
| 2. 1992 – 2021 | Breast Tumor Board, SLUH, biweekly (ceded to Dr. Reisenbichler) |
| 3. 1998 – 2003 | monthly gynecologic oncology CPC, gynecology residents and staff. (format discontinued) |
| 4. 2008 – present | Orthopedic Oncology Tumor Board, SLUH, biweekly |
| 5. 2015 – present | Urinary Tract and Male Genitourinary Oncology Tumor Board, SLUH, monthly |
| 6. Occasional case conferences for other tumor boards at SLUH and St. Mary's STL as needed | |

E. Lectures to clinical residents:

- Gynecology residents: gynecologic pathology, practical pedigree analysis and testing strategies for hereditary breast/ovarian cancer - as requested by Ob/Gyn chief residents, typically 3 hours/year 1991-1995. (Discontinued due to lack of interest from residents, since pathology is no longer a major test item on CREOG/ACOG testing).
- Urology residents: Two one-hour lecture series on uropathology, date uncertain (Discontinued due to lack of interest from residents, since pathology is no longer a major test item on urology boards)
- Orthopedics residents: 2024-2025: One hour-long lecture on bone tumor pathology, one hour-long lecture on soft tissue tumor pathology
- Ophthalmology residents: May 2026: 45-minute-long lecture "Histopathology and cytopathology for ophthalmologists"

F. Grand rounds for clinical departments (CME)

2023 Obstetrics / Gynecology: “Molecular classification of endometrial carcinoma”

G. Other lectures:

- 1999 “Prognostic markers in breast cancer”, 30 min, for “Update in breast cancer treatment for the community practitioner”, CME seminar, organized by St. Louis Univ.
- 2003 “Immunohistochemical and FISH studies in breast cancer”, 1 hour, for Missouri Society of Histotechnology annual continuing education session.
- 2007 “HER2 testing in breast cancer: methods, controversies, QC” (covering new CAP/ASCO consensus), 1 hour, for Missouri Society of Histotechnology annual continuing education session.
- 2007 “Pitfalls in HER2 testing, with updates from ASCO 2007 Breast Cancer Meeting”, 45 minutes, for “Review of the ASCO 2007 Breast Cancer Meeting” CME seminar for community oncologists, organized by Washington Univ., St. Louis. (9/29/07, St. Louis MO)

H. Medical student and undergraduate student shadowing rotations on AP service:

Medical student elective course as needed, joint teaching with other AP service pathologists. Undergraduate student shadowing, starting in 2024, 20 to 30 hours per student, 2 to 3 students per year

III. Clinical Service:

1. Surgical Pathology: Sign-out of:

- A. Saint Louis University Hospital and Saint Mary’s Hospital (St. Louis) general surgical specimens. Neuropathology, pediatric pathology, medical renal biopsy pathology, hematopathology are not included in this specimen pool, as these specimens are handled by their own services. Current St. Mary’s H. St. Louis coverage is vacation coverage.
- B. Consults, surgical pathology and surgical pathology with associated cytology (excluding neuropathology, pediatric pathology, medical renal biopsy pathology, hematopathology).
- C. Heart biopsies
- D. Internal consultations and quality assurance review, estimated 300 to 600 specimens/ year, including for SLU affiliate pathology practices.
- E. St. Mary’s H. St. Louis only: cytology, during coverage weeks

2. Autopsy Pathology: 1990 to present: Sign-out of estimated 15 to 20 autopsies/ year (decreasing to ~10 per year after the residency closed).

3. DNA Diagnostics Laboratory: Back-up and vacation coverage, 1995-2018 (lab closed in 2018). All FISH services.

4. Breast tumor immunohistochemical stain/ DNA flow cytometry/ HER2 FISH panel: Services set up by me in 1997 (breast IHC and flow cytometry for S-phase fraction) and 2003 (HER2 FISH); all interpretation and quality control done by me for all breast tests until 2003 discontinuation of flow cytometry and 2007 shift of FISH to DNA diagnostics laboratory.

5. Quality Control:

- A. Troubleshooting and slide review for the medical school immunohistochemistry lab.; generation of needed control tissues for both histology labs.
- B. Breast cancer immunohistochemistry / FISH statistical reporting for CAP
- C. "Second opinion" intra-institutional slide review, SLUH, Cardinal Glennon Hospital, St. Mary's H., St. Louis, SLU-affiliated and SSM-affiliated Illinois hospitals (current: Anderson H., Maryville; St. Anthony's H., Alton; St. Mary's, Centralia; Good Samaritan H., Mt. Vernon) (formerly: Belleville Memorial H., Belleville)

IV. Collaborative research for other principal investigators

Veterinary and human pathology review for SLU basic science or translational science researchers

1. Dr. Ratna Ray, 5 publications (HCV, bitter melon, other topics), and miscellaneous unpublished preliminary work. I have also provided a minor amount of human tissue immunohistochemical evaluation.
2. Dr. William Wold, 1 publication (oncolytic adenoviral vector)
3. Ad hoc work, little time and few slides involved, for Dr. Ranjit Ray and Dr. Pete Zassenhaus, no publications at this time
4. Unfunded or pending grants, assistance with writing pathology section and listing as co-investigator: Dr. John Chrivia, Dr. Ranjit Ray, Dr. Ratna Ray, Dr. Robert Perman, Dr. Guoyu Ling, Dr. Getahun Abate
5. Dr. Abate, 1 publication (immunity against *Mycobacterium avium* in murine model)
6. I have been the department's liaison with basic science or translational science researchers seeking normal or tumor human tissue for projects.

V. Research as principal investigator (inactive currently)

Somatic cell genetics of human ovarian carcinoma, with emphasis on identification of tumor suppressor genes.

Grants held as principal investigator:

1991	Monsanto Corp., used equipment donation, \$1,500.00 value
1992	American Cancer Society CRIC institutional grant, \$10,000.00, one year
1993	Gynecologic Oncology Group/NCI institutional grant, \$12,500.00 direct, one year
1996-1999	American Cancer Society VM-115 "A Novel Tumor Suppressor Gene in Early Ovarian Cancer", \$72,000.00 direct costs for one year, non-competitive renewal 1997-1998; \$72,000.00 direct costs for one year; \$36,000.00 direct costs for one year, non-competitive renewal 1998-1999
1999-2002	Gustavus and Louise Pfeiffer Research Foundation, 75,000.00 direct costs each year for three years
2003	SLU Interim Research Support Fund: \$25,000.00.

2005-2008 Susan G. Komen Breast Cancer Foundation, “A candidate breast and ovarian tumor suppressor gene on chromosome 17p13.3”, \$200,000.00 direct costs over 3 years.

A variety of unsuccessful applications.

VI. Service

A . Service to outside research entities:

1990-2005 Pathology review of St. Louis University patients to be entered on Gynecologic Oncology Group, Am. College of Surgeons, NSABP protocols
1991-2005 Pathology Committee, Gynecologic Oncology Group (national pathology board that performs quality control review of pathologic material of patients entered on national clinical trials protocols - estimated 800 cancer cases reviewed personally)
1994-1998 Gynecologic Oncology Group Protocol #144 “Molecular genetic analysis of ovarian cancer families”, pathology member (protocol chair H. Gallion)
1996 American Cancer Society ad hoc grant proposal reviewer
2005-2010 Am. J. Gastroenterology ad hoc reviewer

B. St. Louis University committee service:

1996-1997 Search committee member, Obstetrics and Gynecology chairmanship
2000-2004 Cancer committee member