

# Derek C. Radisky

Mayo Clinic Cancer Center  
4500 San Pablo Road  
Jacksonville, FL 32224  
(904) 953-6913 (phone)  
(904) 953-0277 (FAX)

13439 Ellsworth Lane  
Jacksonville, FL 32225  
(904) 220-8920 (home phone/FAX)  
(904) 625-2844 (cell)  
[radisky.derek@mayo.edu](mailto:radisky.derek@mayo.edu)

## POSITIONS

- 1989-1992 Research associate, Department of Medicinal Chemistry, University of Utah, Salt Lake City, UT (Research advisor, Chris Ireland).  
1992-1999 Graduate student, Department of Pathology, University of Utah, Salt Lake City, UT (Doctoral research advisor, Jerry Kaplan).  
1999-2005 Postdoctoral fellow, Life Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, CA (Postdoctoral research advisor, Mina J. Bissell).  
2005- Assistant Professor and Associate Consultant II, Mayo Clinic, Jacksonville, FL.

## OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

- 1996- **Member**, American Society for Cell Biology (ASCB).  
1999- **Member**, American Association of Cancer Research (AACR).  
2003- **Member**, The International EMT Association (TEMTIA).  
2005- **Reviewer**: AAAS Research Competitiveness Service.  
2004- **Ad Hoc Reviewer**, Carcinogenesis, Breast Cancer Research, Cancer Research, Journal of Cell Science, FASEB J, Molecular Carcinogenesis, Molecular Cancer Research, Molecular Cancer Therapeutics, Journal of Gene Medicine, Oncogene, Genes and Development, Nature, Nature Cell Biology, Science.  
2006- **Editorial Board**, Cell Adhesion and Migration  
2009- **Editorial Board**, Open Stem Cell Journal, World Journal of Stem Cells

**Study Section Memberships:** Susan Komen Interdisciplinary Breast Fellowship (2007-), DOD BCRP Multidisciplinary Postdoctoral Fellowship (2007-), DOD BCRP Concept-Pathobiology (2008-), NCI Biology of Breast Premalignancies Special Emphasis Panel (R01) (2008), BCRF-AACR Grants for Translational Breast Cancer Research (2008), Austrian Science Fund (ad hoc), Breakthrough Breast Cancer (ad hoc)

## HONORS

- 1997-1999 Predoctoral Genetics Training Grant, National Institutes of Health  
1999-2001 Alexander Hollaender Distinguished Postdoctoral Fellowship, U.S. Department of Energy  
2001-2002 NRSA Postdoctoral Fellowship, National Institutes of Health  
2002-2005 Postdoctoral Fellowship, American Cancer Society

## TEACHING

- MCB 5000: Cell Biology (2 lectures)  
MCB 6250: Cancer Cell Biology (2 lectures)

## INVITED PRESENTATIONS

Paterson Institute, University of Manchester, England (October 2009)  
Department of Biochemistry, Cambridge University, England (October 2009)  
Karmanos Cancer Institute, Detroit, MI (September 2009)  
Università degli Studi de Firenze, Department of Biochemistry, Florence, Italy (May 2009)  
Department of Biology, University of North Florida, Jacksonville, FL (March, 2009)  
Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston TX (February, 2009)  
McArdle Laboratory, University of Wisconsin, Madison, WI (November 2008)  
University of Colorado Health Sciences Center, Denver CO (November 2008)  
TARGET workshop, Karolinska Institute, Stockholm, Sweden (October 2008)  
University of Minnesota Cancer Center, Minneapolis MN (October 2008)  
National Cancer Institute, Workshop on Paradoxes in Early Stage Carcinogenesis: New Opportunities for Cancer Prevention and Early Detection, Bethesda, MD (July 2008)  
University of California, San Diego, Medical School. (April 2008)  
NIDDK Conference on Intestinal Disease and Repair, Bethesda, MD (March 2008)  
Ontario Cancer Institute, Toronto, Canada (March 2008)  
Timberline Conference on 3D Tissue Biology: Human Stem Cells, Cancer and the Microenvironment, Timberline, OR (Feb 2008)  
Department of Environmental and Occupational Health, University of Pittsburgh, Pittsburgh PA (Oct 2007)  
Thomas L. Petty Aspen Lung Conference, Aspen CO (June 2007).  
Gordon Research Conference on Matrix Metalloproteinases, Il Ciocco, Italy (June 2007).  
Banbury Conference on Epithelial Mesenchymal Transition, Cold Spring Harbour, NY (Feb 2007).  
Department of Cell Biology and Neuroscience, Rutgers University, Piscataway, NJ (Feb 2007).  
Department of Genetics, University of Utah, Salt Lake City, UT (Oct 2006).  
13th Congress of the Society for Free Radical Research, Davos, Switzerland (Aug 2006).  
Department of Neurology/Neuroscience, Weill Medical College of Cornell University, NY, NY (July 2006).  
2nd IFOM-IEO Meeting on Cancer, Milan, Italy (May 2006).  
In Vivo Regulation Mechanisms of Tumor Growth, Yokohama, Japan (March 2006).  
2005 Epithelial Mesenchymal Transition Conference, Vancouver, British Columbia (October 2005).  
I Symposium Oncologia Translacional, Barcelona, Spain (April 2005).  
General Motors Cancer Research Annual Scientific Conference, Washington DC (June 2005).  
Gordon Research Conference on Breast Cancer, Newport, RI (June 2005).  
Mary Babb Randolph Cancer Center, West Virginia University, Morgantown, WV (May 2005).  
Department of Pharmacology, Medical University of South Carolina, Charleston SC (May 2005).  
Wake Forest Cancer Center, Winston-Salem NC (May 2005).  
Winship Cancer Institute, Emory University, Atlanta, GA (April 2005).  
Department of Biology, Arizona State University, Tuscon AZ (March 2005).  
Tumor Microenvironment Keystone Conference, Banff, Alberta, Canada (February, 2005).  
Huntsman Cancer Institute, Salt Lake City, UT (January, 2005).  
Mayo Clinic Cancer Center, Jacksonville, FL (January, 2005).  
44<sup>th</sup> annual meeting of the American Society of Cell Biology, Washington, DC. (December, 2004).  
The 3<sup>rd</sup> International Conference on Tumor Microenvironment: Progression, Therapy, and Prevention, Prague, Czech Republic (October 2004).  
American Cancer Society Making Strides Against Breast Cancer Fundraising Events, San Francisco, CA, and Santa Clara, CA (September, 2004).  
Gordon Research Conference on Proteolytic Enzymes and their Inhibitors, Colby-Sawyer College, New London, NH (July, 2004).  
Gordon Research conference on Signaling by Adhesion Receptors, Roger Williams University, Bristol, RI (June, 2004).  
43<sup>rd</sup> annual meeting of the American Society of Cell Biology, San Francisco, CA. (December, 2003).  
Epithelial Mesenchymal Transition Conference, Port Douglas, Australia (October, 2003).  
Symposium on Metrology and Standards for Cell Signaling: Impact on Tissue Engineering, Gaithersberg, MD (October, 2002).

Schilling Conference: From the Cancer Cell to a Tumor: Tumors as Outlaw Organs, Aptos, CA (November, 2002).  
2<sup>nd</sup> International Conference on Tumor Microenvironment, Baden, Austria (October, 2002).  
Maine Medical Center Research Institute, Scarborough, ME (July 2002).  
Dynamics of Nuclear Structure and Function, Special Interest Subgroup, 41<sup>st</sup> annual meeting of the American Society of Cell Biology, Washington, DC (December, 2001).  
Banbury Conference, Tubulogenesis, Cold Spring Harbor, NY (November, 2001).  
Gordon Research Conference on Marine Natural Products, Ventura, CA (January, 1993).

## PUBLICATIONS

- Radisky, D.C.**, and Hartmann, L.C. Mammary involution and breast cancer risk: transgenic models and clinical studies. *J. Mammary Gland Biol. Neoplasia* **2009**, 14, 181-191. PMID: PMC2693781.
- Santisteban, M., Reiman, J.M., Asiedu, M.K., Behrens, M.D., Nassar, A., Kalli, K.R., Haluska, P., Ingle, J.N., Hartmann, L.C., Manjili, M.H., **Radisky, D.C.**, Ferrone, S., Knutson, K.L. Immune-Induced Epithelial to Mesenchymal Transition In vivo Generates Breast Cancer Stem Cells. *Cancer Res.* **2009**, 69, 2887-2895. PMID: PMC2664865. [cover article]
- Marlow, L.A., Reynolds, L.A., Cleland, A.S., Cooper, S.J., Gumz, M.L., Kurakata, S., Fujiwara, K., Zhang, Y., Sebo, T., Grant, C., McIver, B., Wadsworth, J.T., **Radisky, D.C.**, Smallridge, R.C., Copland, J.A. Reactivation of Suppressed RhoB is a Critical Step for the Inhibition of Anaplastic Thyroid Cancer Growth. *Cancer Res.* **2009**, 69, 1536-44. PMID: PMC2644344.
- Radisky, D.C.**, Stallings-Mann, M., Hirai, Y., Bissell, M.J., Single proteins might have dual but related functions in intracellular and extracellular microenvironments. *Nat Rev Mol Cell Biol.* **2009**, 10, 228-34. [cover article]
- Vierkant, R.A., Hartmann, L.C., Pankratz, V.S., Anderson, S.S., **Radisky, D.**, Frost, M.H., Vachon, C.M., Ghosh, K., Distad, T.J., Degnim, A.C., and Reynolds, C.A. Lobular Involution: Localized Phenomenon or Field Effect? *Breast Cancer Res. Treat.* **2009**, 117, 193-196.
- Chen, C.S., Nelson, C.M., Khauv, D., Bennett, S., Radisky, E.S., Hirai, Y., Bissell, M.J., and **Radisky, D.C.** Homology with vesicle fusion mediator syntaxin-1a predicts determinants of epimorphin/syntaxin-2 function in mammary epithelial morphogenesis. *J Biol Chem.* **2009** 284, 6877-84. PMID: PMC2652326 [cover article]
- Cao, Y., Wang, L., Nandy, D., Zhang, Y., Basu, A., **Radisky, D.**, and Mukhopadhyay, D. Neuropilin-1 upholds dedifferentiation and propagation phenotypes of renal cell carcinoma cells by activating Akt and Sonic Hedgehog axes. *Cancer Res* **2008**, 68, 8667-8672.
- Alcaraz, J., Xu, R., Mori, H., Nelson, C.M., Mroue, R., Spencer, V.A., Brownfield, D., **Radisky, D.C.**, Bustamante, C., Bissell, M.J. Laminin and biomimetic extracellular elasticity enhance functional differentiation in mammary epithelia. *EMBO J.* **2008**, 27, 2829-2838. PMID: PMC2569873.
- Radisky, D.C.** Fibroblasts act as co-conspirators for chemotherapy resistance. *Cancer Biology and Therapy* **2008**, 7, 1348-1349.
- Radisky, D.C.**, and LaBarge, M.A. Epithelial-Mesenchymal Transition and the Stem Cell Phenotype. *Cell Stem Cell* **2008**, 2, 511-512.
- Nelson, C.M., Khauv, D., Bissell, M.J., and **Radisky, D.C.** Change in cell shape is required for matrix metalloproteinase-induced epithelial-mesenchymal transition of mammary epithelial cells. *J. Cell Biochem.* **2008**, 105, 25-33. [cover article]

- Frederick, L.A., Matthews, J.A., Jamieson, L., Justilien, V., Thompson, E.A., **Radisky, D.C.**, Fields, A.P. Matrix metalloproteinase-10 is a critical effector of protein kinase C $\alpha$ -mediated lung cancer. *Oncogene*. **2008**, 27, 4841-4853.
- Przybylo, J.A. and **Radisky, D.C.** Matrix metalloproteinase-induced fibrosis and malignancy in breast and lung. *Proc. Amer. Thorac. Soc.* **2008**, 5, 316-22.
- Turley, E.A., Veiseh, M., **Radisky, D.C.**, and Bissell, M.J. Mechanisms of Disease: epithelial-mesenchymal transition-does cellular plasticity fuel neoplastic progression? *Nat Clin Pract Oncol.* **2008**, 5, 280-90.
- Orlichenko, L.S., and **Radisky, D.C.** Matrix metalloproteinases stimulate epithelial-mesenchymal transition during tumor development. *Clin Exp Metastasis*. **2008** 25, 593-600. Epub Feb 20.
- Radisky, D.C.** Leading the charge. *Nat. Cell Biol.* **2007**; 9(12), 1341-2.
- Hirai, Y., Bissell, M.J., and **Radisky, D.C.** Extracellular localization of epimorphin/syntaxin-2. *Blood*. **2007** 110, 3082.
- Stallings-Mann, M., and **Radisky, D.** Matrix metalloproteinase-induced malignancy in mammary epithelial cells. *Cells Tissues Organs*. **2007** 185, 104-10.
- Hirai, Y., Nelson, C.M., Yamazaki, K., Takebe, K., Przybylo, J., Madden, B., and **Radisky, D.C.** Non-classical export of epimorphin and its adhesion to  $\alpha$ v-integrin in regulation of epithelial morphogenesis. *J Cell Sci*. **2007** 120, 2032-43.
- Radisky, E.S. and **Radisky, D.C.** Stromal induction of breast cancer: Inflammation and invasion. *Rev Endocr Metab Disord*. **2007** 8, 279-87.
- Przybylo, J.A. and **Radisky, D.C.** Matrix metalloproteinase-induced epithelial-mesenchymal transition: Tumor progression at Snail's pace. *Int J Biochem Cell Biol*. **2007** 39, 1082-1088.
- Radisky, D.C.** and Bissell, M.J., NF-kappaB links oestrogen receptor signalling and EMT. *Nat Cell Biol*. **2007**, 9, 361-3.
- Radisky, D.C.**, Kenny, P.A., and Bissell, M.J. Fibrosis and cancer: Do myofibroblasts come also from epithelial cells via EMT? *J Cell Biochem*. **2007**, 101, 830-839.
- Liu, H., **Radisky, D.C.**, Nelson, C.M., Zhang, H., Fata, J.E., Roth, R.A., and Bissell, M.J. Mechanism of Akt1 inhibition of breast cancer cell invasion reveals a protumorigenic role for TSC2. *Proc Natl Acad Sci USA* **2006**, 103, 4134-4139.
- Radisky, D.C.**, Bissell, M.J. Matrix metalloproteinase-induced genomic instability. *Curr. Opin. Genet. Dev.* **2006**, 16, 45-50.
- Bissell, M.J., Kenny, P.A., **Radisky, D.C.** Microenvironmental regulators of tissue structure and function also regulate tumor induction and progression: the role of extracellular matrix and its degrading enzymes. *Cold Spring Harb Symp Quant Biol* **2005**, 70,1-14.
- Radisky, D.C.**, Levy, D.D., Littlepage, L.E., Fata, J.E., Liu, H., Nieto, M.A., Werb, Z., and Bissell, M.J.. 2004. MMP-3-induced Rac1b causes genomic instability and epithelial-to-mesenchymal transition. *Nature* **2005**, 436, 123-127. (See highlights in: *Nature Medicine* 2005, 11, 1156-1159; *J. Cell Biol.* 2005, 170, 336-337; *Nature Reviews Cancer* 2005, 5, 585; *Nature Reviews Mol Cell Biol* 2005, 6, 596; *Science* 2005, 309, 536.)
- Radisky, D.C.** Epithelial Mesenchymal Transition. *J. Cell Sci.* **2005**, 118, 4325-4326.

- Liu, H., **Radisky, D.C.**, Bissell, M.J. Proliferation and polarity in breast cancer: untying the gordian knot. *Cell Cycle*. **2005** 4, 646-649.
- Liu, H., **Radisky, D.C.**, Wang, F., and Bissell, M.J. Polarity and proliferation are controlled by distinct signaling pathways downstream of PI3-kinase in breast epithelial tumor cells. *J Cell Biol*. **2004** 164, 603-12.
- Radisky, D.C.**, and Bissell, M.J. Cancer. Respect thy neighbor! *Science*. **2004**, 303,775-7.
- Novaro, V., **Radisky, D.C.**, Ramos Castro, N.E., Weisz, A., and Bissell, M.J. Malignant mammary cells acquire independence from extracellular context for regulation of estrogen receptor alpha. *Clin Cancer Res*. **2004**, 10, 402S-9S.
- Takebe, K.\*, Oka, Y.\*, **Radisky, D.\***, Tsuda, H., Tochigui, K., Koshida, S., Kogo, K., and Hirai, Y. Epimorphin acts to induce hair follicle anagen in C57BL/6 mice. *FASEB J*. **2003**, 17, 2037-47.
- Radisky, D.C.**, Hirai, Y., and Bissell, M.J. Delivering the message: epimorphin and mammary epithelial morphogenesis. *Trends Cell Biol*. **2003**, 13, 426-34.
- Bhattacharyya, C., Grate, L.R., Rizki, A., **Radisky, D.**, Molina, F.J., Jordan, M.I., Bissell, M.J., and Mian, I.S. Simultaneous classification and relevant feature identification in high-dimensional spaces: application to molecular profiling data. *Signal Processing* **2003**, 83, 729-743.
- Tuttle, M.S., **Radisky, D.**, Li, L., and Kaplan, J. A dominant allele of PDR1 alters transition metal resistance in yeast. *J. Biol. Chem*. **2003**, 278, 1273-1280.
- Novaro, V., Pustovrh, C., Colman-Lerner, A., **Radisky, D.**, Lo Nostro, F., Paz, D., Jawerbaum, A., and Gonzalez, E. Nitric oxide induces gelatinase A (matrix metalloproteinase 2) during rat embryo implantation. *Fertil. Steril*. **2002**, 78, 1278-1287.
- Bissell, M.J., **Radisky, D.C.**, Rizki, A., Weaver, V.M., and Petersen, O.W. The organizing principle: microenvironmental influences in the normal and malignant breast. *Differentiation*, **2002**, 70, 537-546.
- Wang, F., Hansen, R.K., **Radisky, D.**, Yoneda, T., Barcellos-Hoff, M.H., Petersen, O.W., Turley, E.A., and Bissell, M.J. Phenotypic reversion or death of cancer cells by altering signaling pathways in three-dimensional contexts, *J. Natl. Cancer Inst.*, **2002**, 94, 1494-1503.
- Radisky, D.C.**, Muschler, J., and Bissell, M.J. Order and disorder: the role of extracellular matrix in epithelial cancer. *Cancer Investigation* **2002**, 20, 139-53.
- Bissell, M.J., and **Radisky, D.** Putting Tumors in Context. *Nature Reviews Cancer* **2001**, 1, 46-54.
- Pujuguet, P., **Radisky, D.**, Levy, D., Lacza, C., and Bissell, M.J. Extracellular matrix-induced expression of  $\beta$ -casein in mammary epithelial cells is controlled by chromatin acetylation. *J. Cell. Biochem*. **2001** 83, 660-670.
- Hirai, Y., **Radisky, D.**, Boudreau, R., Simian, M., Stevens, M., Oka, Y., Takebe, K., Niwa, S., and Bissell, M.J. Epimorphin mediates mammary luminal morphogenesis through control of C/EBP $\beta$ . *J. Cell Biol.*, 153, 785-794.
- Ward, D.M.\*, **Radisky, D.\***, Scullion, M.A., Tuttle, M.S., Vaughn, M., and Kaplan, J. hVPS41 is expressed in multiple isoforms and can associate with vesicle through a RING-H2 finger motif. *Exp. Cell Res.*, **2001**, 267, 126-134.

- Radisky, D.C.**, Hagios, C., and Bissell, M.J. Tumors are unique organs defined by abnormal signaling and context. *Semin. Cancer Biol.* **2001**, 11, 87-95.
- Moler, E.J.\*, **Radisky, D.C.\***, and Mian, I.S. Integrating naïve Bayes models and external knowledge to examine copper and iron homeostasis in *S. cerevisiae*. *Physiol. Genomics* **2000**, 4, 127-135.
- Radisky, D.C.**, and Kaplan, J. Regulation of metal transport across the yeast plasma membrane. *J. Biol. Chem.* **1999**, 274, 4497-4499.
- Radisky, D.C.\***, Babcock, M.C.\*, and Kaplan, J. The yeast frataxin homologue mediates mitochondrial iron efflux: evidence for a mitochondrial iron cycle. *J. Biol. Chem.* **1999**, 274, 4481-4484.
- Davis-Kaplan, S.R., Askwith, C.C., Bengtzen, A.C., **Radisky, D.C.**, and Kaplan, J. Chloride is an allosteric effector of copper assembly for the yeast multicopper oxidase Fet3p: An unexpected role for intracellular chloride channels. *Proc. Natl. Acad. Sci. U.S.A.* **1998**, 95, 13641-13645.
- Radisky, D.C.**, and Kaplan, J. Iron in cytosolic ferritin can be recycled through lysosomal degradation in human fibroblasts. *Biochem J.*, **1998**, 336, 201-205.
- Radisky, D.C.**, Snyder, W.B., Emr, S.D., and Kaplan, J. Characterization of VPS41, a gene required for vacuolar trafficking and high-affinity iron transport in yeast. *Proc. Natl. Acad. Sci. USA* **1997**, 94, 5662-5666.
- Barrows, L.R., **Radisky, D.C.**, Copp, B.R., Swaffer, D.S., Kramer, R.A., Warters, R.L., and Ireland, C.M. Makaluvamines, marine natural products, are active anti-cancer agents and DNA Topo II inhibitors. *Anticancer Drug Des.* **1993**, 8, 333-347.
- Radisky, D.C.**, Radisky, E.S., Barrows, L.R., Copp, B.R., Kramer, R.A., and Ireland, C.M. Novel cytotoxic topoisomerase II inhibiting pyrroloiminoquinones from Fijian sponges of the genus *Zyzya*. *J. Am. Chem. Soc.* **1993**, 115, 1632-1638.

## BOOK CHAPTERS AND PROCEEDINGS

- Novaro, V., and **Radisky, D.** 93<sup>rd</sup> Annual meeting of the American Association for Cancer Research, Breast Cancer Res., **2002**, 4, 165-168.
- Radisky, D.C.**, Levy, D.D., and Bissell, M.J. Dissecting the mechanism of matrix metalloproteinase-induced transformation of mouse mammary epithelial cells. *Proceedings of the 2<sup>nd</sup> International Conference on Tumor Microenvironment, Baden (Austria), 2002*, Witz, I.P., ed. (Monduzzi Editore, Bologna, Italy), p.141-144.
- Bissell, M.J., Mian, S., **Radisky, D.**, and Turley, E. Tissue-specificity: Structural cues allow diverse phenotypes from a constant genotype. In: Newman SA, Müller G.B., eds. *Origins of Organismal Form: Toward a Postgenomic Synthesis*. Vienna Series in Theoretical Biology. **2002**.
- Ireland, C.M., Copp, B.R., Foster, M.P., McDonald, L.A., **Radisky, D.C.**, and Swersey, J.C. Biomedical potential of marine natural products, in *Pharmaceutical and Bioactive Natural Products, Marine Biotechnology Volume 1* (Attaway, D.; Zaborsky, O.R., eds.), Plenum Publishing Corp., New York, N.Y., **1993**, 1-43.

## PATENTS

- Ireland, C.M., **Radisky, D.C.**, Barrows, L.R., and Kramer, R.A. Antineoplastic and antibacterial pyrrolo[4,3,2-de]quinoline-8(1H)-ones. **1994**, U.S. Patent 5,414,001.

## RESEARCH SUPPORT

### Ongoing Research Support

R01 CA132879-01 (LM Hartmann) 09/2008-08/2012 1.20 calendar  
NIH/NCI

Risk Prediction for Breast Cancer: A Tissue-Based Strategy

The goal of this activity is to test currently available risk prediction models in women with benign breast disease and to develop a new breast cancer risk prediction model that incorporates tissue biomarker features.

Role: CI

2006KOMENOD (CM Nelson) 09/2007 – 7/2010 1.20 calendar

Susan Komen Foundation

Engineered culture model of breast fibrogenesis

The goals of this project are to develop 3D micropatterned models to investigate the role of epithelial-mesenchymal transition in the development of breast fibrosis.

Role: Co-PI

R21 CA128660-1 (CM Nelson) 09/2007 – 07/2009 1.20 calendar

NIH/NCI

In vitro synthesis of fibrosis genesis

The goals of this project are to use primary cell culture models to investigate the role of cell conformation and tissue structure in the development of breast fibrosis.

Role: CI

R01 CA122086-1 (DC Radisky) 09/2007 – 8/2012 3.00 calendar

NIH/NCI

Mechanisms of MMP-induced malignancy in breast cells.

The goals of this project are to dissect the mechanisms of MMP-induced malignancy in mammary epithelial cells.

Role: PI

State of Florida (DC Radisky) 07/2007 – 06/2010 2.40 calendar

Florida Department of Health

Matrix metalloproteinase-induced lung fibrosis and malignancy

The goals of this project are to use 3D culture and transgenic mouse models to identify how matrix metalloproteinases stimulate lung fibrosis and lung cancer.

Role: PI

FED-1 (DC Radisky) 07/2006 – 09/2009 1.20 calendar

Department of Energy

Transgenic mouse line development

The goals of this project are to develop transgenic mouse lines to investigate MMP-induced mammary cancer.

Role: PI

### Completed Research Support

J & E King Biomed Rsch Program (AP Fields) 07/2006 – 06/2008 2.40 calendar

Florida Department of Health – Team Science Project 3

MMPs, Rac1b, and Oncogenic PKC $\alpha$  in Lung Cancer

The goals of this project are to define how microenvironmental matrix metalloproteinases activate cellular pathways that interact with oncogenic PKC $\alpha$  signaling.

Role: CI

State of Florida (DC Radisky)

01/2007 – 08/2007

Florida Department of Health

Mechanisms of MMP-induced malignancy in breast cells

The goals of this project are to dissect the mechanisms of matrix metalloproteinase-induced malignancy in mammary epithelial cells.

Role: PI