

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.

<b>NAME</b> James S. Norris		<b>POSITION TITLE</b> Professor & Chairman	
<b>EDUCATION/TRAINING</b> ( <i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i> )			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR(s)</b>	<b>FIELD OF STUDY</b>
University of New Hampshire, Durham Keene State College, Keene, NH	BS	1961-1964 1966	Biology
University of Colorado, Boulder, Colorado	Ph.D.	1971	Biology

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**A. Positions:**

1967-1968 Teaching Assistant, Department of Biology, University of Colorado  
 1968-1970 Research Assistant, Department of Biology, University of Colorado  
 1970-1972 Postdoctoral Fellow, Department of Physiology and Biophysics, University of Illinois (Mentor: Jack Gorski)  
 1972-1973 Postdoctoral Fellow, National Institutes of Health (Mentor: Peter Kohler)  
 1973-1977 Instructor, Department of Cell Biology, Baylor College of Medicine  
 1977-1983 Assistant Professor, Dept. Medicine, University of Arkansas for Medical Sciences  
 1983-1988 Associate Professor, Dept. Med., Physiology-Biophysics, Univ. Arkansas Med. Sciences  
 1988- Professor, Department of Medicine, Medical University of South Carolina  
 1995-1996 Interim Chairman, Department of Microbiology and Immunology, MUSC  
 1997-2000 Professor and Vice Chairman, Department of Microbiology and Immunology, MUSC  
 2000- Professor and Chairman, Department of Microbiology and Immunology, MUSC

**Honors:**

Member, Metabolic Pathology Study Section 10/91-6/93, 10/95-6/99 (Chair 1997-1999), 2/02, 10/02  
 Member, NIH Reviewers Reserve 7/93-6/97  
 Site visitor NCI Cancer Center Support Committee (10/94), (2/95), (6/95), (1/96) (2/00) (2/02) (5/02)  
 Site visitor NCI Program Project Committee 6/97, 9/97  
 Special Emphasis Panel, National Institute of Diabetes & Digestive & Kidney Diseases 8/01  
 Special Emphasis Panel, National Institute of Diabetes & Digestive & Kidney Diseases 3/03  
 Member, NIAID Program Project, April 7-8/03, Bethesda, MD  
 Site Visitor, NIH/NCI Program Project, May 21-23/03, New York, NY  
 Member, NIH/MEP Study Section, June 19-22/03, San Diego, CA

**Editorial or Scientific Boards:**

1991-92 Scientific Advisory Board, International Hormonal Carcinogenesis Symposium  
 1996-98 Cellular Pharmacology (Editorial Board)  
 1997 - present Gene Therapy & Molecular Biology (Editorial Board)  
 1998 - present International Society of Cancer Gene Therapy (Council)  
 2001 - present Biomedicine & Pharmacotherapy (Editorial Board)  
 2001 - present Journal of Pharmacology and Experimental Therapeutics (Editorial Advisory Board)  
 2003 - present Cancer Gene Therapy (Editorial Advisory Board)  
 2005 - President-Elect International Society for Cancer Gene Therapy

**Professional Organizations:** AAAS; American Society of Cell Biology; British Association for Cancer Research; American Society for Microbiology; American Association for Cancer Research; Genetical Society of America; Society for Basic Urological Research; American Society of Gene Therapy; International Society for Cancer Gene Therapy ; American Urological Association (Associate); American Chemical Society

**B. Selected Peer-Reviewed Publications and Manuscripts (selected from 111):**

- Fan W, Ma J-X, Cheng L, **Norris JS**. (1997) Molecular Cloning of Ta16, a transcriptional repressor that may mediate glucocorticoid-induced growth arrest of leiomyosarcoma cells. *Mol. Endocrinol.*, **11**:1342-1352.
- Voeks DJ, Clawson GA, **Norris JS**. (1998) Ribozymes in gene therapy of prostate cancer. In: Ribozymes in the Gene Therapy of Cancer, Scanlon KJ and Kashani-Sabet M (eds.), RG Landes Company, George, Texas, Chapter 13, pp. 165-173.
- DeHaven J, Dahm M, Schwartz D, Whitehurst M, Lacy E, Norris JS. (1998) Novel retroviral sequences are expressed in the epididymis and uterus of Syrian hamsters. *J. Gen. Virol.*, **79**:2687-2694.
- Norris JS**, Hoel B, Voeks DJ, Maggouta F, Dahm M, Pan W, Clawson G. (1999) Design and Testing of Ribozymes for Cancer Gene Therapy. In: Cancer Gene Therapy – Past Achievements and Future Challenges, Habib N. (ed.), Plenum Publishing Co., London.
- Li JJ, Hou X, Banerjee SK, Liao D-ZJ, Maggouta F, **Norris JS**, Li SA. (1999) Overexpression and amplification of c-myc in the Syrian hamster kidney during estrogen carcinogenesis: A probable critical role in neoplastic transformation. *Can. Res.*, **59**:2340-2346.
- Hudson C, Schwartz D, DeHaven J, Schulte B, **Norris JS**. (1999) Exogenous 17 $\beta$ -Estradiol blocks Alpha and Mu, but not Pi class glutathione S-transferase immunoreactivity in epithelium of Syrian hamster *vas deferens*. *J. Histochem.*, **47**(1):1-8.
- Ren L, Schalles SL, Pan W, Isom CE, Loy SE, Lee J-H, Benedict CM, Pickering MT, **Norris JS**, Clawson GA. (1999) Construction and deployment of triple ribozymes targeted to multicatalytic proteinase subunits C3 and C9. *Gene Ther. Mol. Biol.*, **3**:1-13.
- Norris JS**, Schofield D, Westwater C. (2000) Prokaryotic gene therapy to combat multidrug-resistant bacterial infection. *Gene Therapy*, **7**: 723-725.
- Huang Y, Johnson RK, **Norris JS**, Fan W. (2000) Nuclear Factor- $\kappa$ B/I- $\kappa$ B signaling pathway may contribute to the mediation of Paclitaxel-induced apoptosis in solid tumor cells. *Cancer Research*, **60**:4426-4432.
- Voelkel-Johnson C, Voeks DJ, Greenberg NM, Barrios R, Maggouta F, Kurtz DT, Schwartz DA, Keller GM, Papenbrock T, Clawson GA, **Norris JS**. (2000) Genomic instability-based transgenic models of prostate cancer. *Carcinogenesis*, **21**:1623-1627.
- Hyer ML, Dong J-Y, Rubinchik S, **Norris JS**. (2000) GFP-FasL expression induces Fas-mediated apoptosis in human prostate cancer cells. *Molecular Therapy*, **2**(4):348-358.
- Rubinchik S, Lowe S, Jia Z, **Norris JS**, Dong J-Y. (2001) Creation of a new transgene cloning site near the right ITR of Ad5 results in reduced enhancer interference with tissue-specific and regulatable promoters. *Gene Therapy*, **8**(3):247-253.
- Hudson CE, Schulte BA, Sutter TR, **Norris JS**. (2001) Steroid hormones modulate expression of cytochrome P450 enzymes in male hamster reproductive tract and leiomyosarcomas. *Carcinogenesis*, **22**(50):101-108.
- Norris JS**, Hyer ML, Voelkel-Johnson C, Lowe SL, Rubinchik S, Dong J-Y. (2001) The Use of Fas Ligand, TRAIL and Bax in Gene Therapy of Prostate Cancer. In: Current Gene Therapy, Lowenstein PR (ed), Bentham Science Publishers Ltd., The Netherlands, **1**:123-136.
- Lowe SL, Rubinchik S, Honda Y, McDonnell TJ, Dong J-Y, **Norris JS**. (2001) Prostate-specific expression of Bax delivered by an adenoviral vector induces apoptosis in LNCaP prostate cancer cells. *Gene Ther.*, **8**:1363-1371.
- Rubinchik S, Wang D, Yu H, Fan F, Luo M, **Norris JS**, Dong J-Y. (2001) A complex adenovirus vector that delivers FasL-GFP with combined prostate-specific and tetracycline-regulated expression. *Molecular Therapy*, **4**(5):416-425.
- Voelkel-Johnson C, King DL, **Norris JS**. (2002) Resistance of prostate cancer cells to soluble TNF-related apoptosis-inducing ligand (TRAIL/Apo2L) can be overcome by Doxorubicin or adenoviral delivery of full-length TRAIL. *Cancer Gene Therapy*, **9**(2):164-172.
- Schofield DA, Westwater C, Dolan JW, Schmidt MG, **Norris JS**. (2001) Controlled expression in *Klebsiella pneumoniae* and *Shigella flexneri* using a bacteriophage P1-derived C1-regulated promoter system. *J. Bacteriology*, **183**(23):6947-6950.
- Westwater C, Schofield DA, Schmidt MG, **Norris JS**, Dolan JW. (2002) Development of a P1 phagemid system for the delivery of DNA into Gram-negative bacteria. *Microbiology*, **148**(4):953-950.
- Honda T, Kagawa S, Spurgers KB, Gjertsen BT, Roth JA, Fang B, Lowe ST, **Norris JS**, Meyn RE, McDonnell TJ. (2002) A recombinant adenovirus expressing wild-type Bax induces apoptosis in prostate cancer cells independently of their Bcl-2 status and androgen sensitivity. *Cancer Biology & Therapy*, **1**(2):163-167.
- Schofield DA, Westwater C, Dolan JW, **Norris JS**, Schmidt MG. (2002) Tight regulation and modulation via a C1-regulated promoter in *Escherichia coli* and *Pseudomonas aeruginosa*. *Current Microbiology*, **44**(6):425-430.

- Hyer ML, Sudarshan S, Kim, Y, Reed JC, Dong J-Y, Schwartz DA, **Norris JS**. (2002) Down-regulation of c-FLIP sensitizes DU145 Prostate Cancer Cells to Fas-mediated Apoptosis. *Cancer Biology and Therapy*, **1(4)**:405-410.
- Kasman LM, Kasman A, Westwater C, Dolan J, Schmidt MG, **Norris JS**. (2002) Overcoming the Phage replication threshold: a mathematical model with implications for phage therapy. *J. Virology*, **76(11)**:5557-5564.
- Huang Y, Fang Y, Dziadyk JM, **Norris JS**, Fan W. (2002) The possible correlation between activation of NF- $\kappa$ B/I $\kappa$ B pathway and the susceptibility of tumor cells to paclitaxel-induced apoptosis. *Oncology Res./Anti-Cancer Design*, **13(2)**:113-122(10).
- Schofield DA, Westwater C, Dolan JW, **Norris JS**, Schmidt MG. (2002) Doc-mediated cell killing in *Shigella flexneri* using a C1/LacI controlled expression system. *FEMS Microbiol Lett.*, **215**:237-242.
- Hyer ML, Sudarshan S, Schwartz DA, Hannun YA, Dong J-Y, **Norris JS**. (2003) Quantification and characterization of the bystander effect in prostate cancer cells following adenovirus-mediated FasL expression. *Cancer Gene Therapy*, **10(4)**:330-339.
- Westwater C, Kasman LM, Schofield DA, Werner PA, Dolan JS, Schmidt MG, Norris JS. (2003) Use of genetically engineered phage to deliver antimicrobial agents to bacteria: An alternative therapy for the treatment of bacterial infections. *Antimicrobial Agents and Chemotherapy*, **47(4)**: 1301-1307.
- Schofield DA, Westwater C, Hoel BD, Werner PA, Norris JS, Schmidt MG. Development of a thermally regulated broad spectrum promoter system for use in pathogenic Gram-positive species. *Applied and Environmental Microbiol.*, **69(6)**, 2003.
- Fanzo JC, Lynch MP, Phee H, Hyer ML, Cremesti A, Grassmé H, Norris JS, K. Coggeshall M, Rueda BR, Pernis AB, Kolesnick R, Gulbins E. CD95 rapidly clusters in cells of diverse origins. *Cancer Biology and Therapy*, in press **2(4)**: 2003.
- Imai M, Hwang H-Y, Norris JS, Tomlinson S. The effect of Dexamethasone on human mucin1 expression and antibody-dependent complement sensitivity in a prostate cancer cell line *in vitro* and *in vivo*. *Immunology* 111:291-207, 2003.

**C. Research Projects Ongoing during the Last 3 Years:**

1. Title: Viral Vector Core Shared Facility [PI – Norris]  
 Agency: NIH/NCI 1 R24 CA82933-01 [NCI ZCA1-SRRB-C (MC1)]  
 Funding Period: 03/01/2001 – 02/28/2006  
 Role: PI  
 Aims: The aim of this grant is to assist cancer center investigators in selection and design of vectors to express genes of interest and provide services. The facility will focus on three key areas: vector design, vector production, and quality control.
  
2. Title: Hormonal Modulation of Taxol Action in Solid Tumors [PI – Fan]  
 Agency: NIH/NCI - NIH R01 CA92280-01A1  
 Funding Period: 04/01/1996 – 03/31/2005  
 Role: Co-Investigator  
 Aims: The aim of this grant is to study the mechanism of taxol's action in tumors of the reproduction track and how the mechanism is altered by glucocorticoids
  
3. NIH/NCI PO1 CA97132-01A1  
 Title: Sphingolipids in Cancer Therapy and Angiogenesis Yusuf Hannun, Program PI  
 Agency: NIH/NCI PO1 CA97132-01A1  
 Funding Period: 07/01/2003 – 06/30/2008  
 Role: PI-James S. Norris Project 2: Genesis of Bystander Activity in FasL Gene Therapy  
 Aims: Investigate the mechanism of bystander activity in AdGFPFasL-treated prostate cancer cells *in vitro/in vivo*.

● **Research Projects Completed during the Last 3 Years:**

1. Title: Induction and Analysis of Prostate Cancer [PI – Norris]  
Agency: NIH 5 R01 CA69598  
Funding Period: 09/01/97 - 06/30/2002  
Role: PI  
Aims: The aim of this study was to use genomic instability in the prostate of transgenic mice to recapitulate the pathway of human prostate cancer development.
  
2. Title: Immune Mediated Clearance of Prostate Tumor Cells Phase V [PI – Norris]  
Agency: Hollings Cancer Center/DOD N6311601MD10004  
Funding Period: 07/01/01 – 06/30/03  
Role: PI  
Aims: Investigation into complement regulators expressed on prostate tumor cells and their role in immune evasion.
  
3. Title: Steroid Modulation of Tumor Cell Growth: Mechanism [PI - Norris]  
Agency: NIH CA49949  
Funding Period: 09/01/88-02/28/03  
Role: PI  
Aims: The aim of this grant was to study hormonal induction of leiomyosarcoma in Syrian hamsters. This grant is not being renewed.