

**CURRICULUM VITAE**

**Asim B. Abdel-Mageed, D.V.M., MS, Ph.D.**

Assistant Professor

Adjunct Assistant Professor of Pharmacology

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**Marital status:** Married, Ilham (wife) and three children, Aymen, Lina & Akrum  
**Date & Place of Birth:** October 23, 1959, Khartoum, Sudan

**EDUCATION**

<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR</b>	<b>FIELD OF STUDY</b>
Univ. of Khartoum, Khartoum, Sudan	D.V. M.	1983	Veterinary Medicine
Kansas State University, Manhattan, KS	M.S.	1989	Toxicology
Kansas State University, Manhattan, KS	Ph.D.	1993	Toxicology
Tulane Health Sc. Ctr, New Orleans, LA	Post-Doc	1993-95	Pharmacology

**RESEARCH AND PROFESSIONAL EXPERIENCE**

- 1998-present Associate Professor, Department of Urology, TUHSC, New Orleans, LA
- 1998-present Adjunct Assostant Professor of Pharmacology, TUHSC, New Orleans, LA
- 1998-present Director, Molecular Oncology Research Laboratory, Dept. of Urology, TUHSC
- 1998-present Faculty Member, Molecular and Cellular Biology Graduate Program, TUHSC.
- 1998-present Program Member, Tulane Cancer Center, TUHSC, New Orleans, LA
- 1996-1997: Instructor, TUHSC, Department of Pharmacology, New Orleans, LA
- 1994-1995: Post-Doctoral Fellow, Department of Pharmacology, TUHSC, New Orleans, LA
- 1987-1993: MS/ Ph.D. Student, College of Veterinary Med., KSU, Manhattan, KS
- 1983-1987: Veterinary Practitioner, Faculty of Veterinary Med, Univ. of Khartoum, Sudan

**SOCIETAL AFFILIATIONS:**

- American Association for Cancer Research (AACR)
- International Society of Preventive Oncology (ISPO)
- American Urological Association
- Society of Toxicology,
- Phi Kappa Phi (Honor),
- The Society of Phi Zeta (Honor),
- Alumni Association (KSU)
- Sudan Veterinary Medical Association.

**HONORS AND AWARDS**

University of Khartoum academic excellence prize, 1983

Sudan Agricultural Bank academic excellence prize, 1983  
University of Khartoum Scholarship 1987-93  
Arthur Furest Award, American College of Toxicology (ACT), 1990  
Recipient of ACT travel award, 1990  
Phi Kappa Phi honor society (academic excellence)  
Rotary Club International academic excellence scholarship, KSU, 1991  
The Society of Phi Zeta (honor), Kansas State University, 1990  
Recipient of Society of Toxicology travel award, 1993  
Joe W. & Dorothy Dorset Brown Foundation Research Fellowship, Tulane Cancer Center, 1995/1996.  
Cancer Interdisiplinary Research Workshop Award, Tulane/LSU, 1997  
Certificate of appreciation, ICA/NIDDK Scientific Symposium held in Washington, D.C., 1997  
Certificate of appreciation, International Society of Preventive Oncology meeting , Nice, France, 1998.  
American Urological Association, Summer Res. Conference, Houston, TX, July 1997-1999  
AACR Scholar Award, Prostate Cancer, Palm Springs, CA, 1998  
ACS 18<sup>th</sup> International Cancer Congress, Oslo, Norway, 2002.  
Named American Cancer Society Research Scholar, July 2003.  
External Program Advisory Committee for Tuskegee University EXPORT Center (7.5 million dollars), 2003.  
Invited Speaker, American Cancer Society Relay For Life Rally 2003

#### **STUDY SECTIONS:**

US Army Congressionally Directed Research Program (USACDRP) Prostate Cancer Research Program: 1999-2001.  
US ARMY, Breast Cancer Research Program Concept CBY-1 Panel, 2003.  
US Army Congressionally Directed Research Program (USACDRP) Prostate Cancer Research Program: 2003.  
US ARMY, Breast Cancer Research Program Concept CBY-1 Panel, 2004.  
US Army Congressionally Directed Research Program (USACDRP) Prostate Cancer Research Program, 2004.

#### **EDITORIALSHIP:**

Cancer  
International Journal of Cancer

#### **RESEARCH INTERESTS:**

Dr. Abdel-Mageed received his doctor of veterinary medicine from the University of Khartoum, Sudan, in 1983. He then joined the Department of Medicine, Pharmacology and Toxicology, University of Khartoum as a junior faculty member and veterinary practitioner and

remained there until 1987. Dr. Abdel-Mageed later obtained MS (1989) and Ph.D. (1993) degrees in molecular physiology/toxicology at Kansas State University, Manhattan, Kansas. As a postdoctoral fellow (1994-5) and research instructor of pharmacology (1996) in Dr. Krishna C. Agrawal's laboratory at Tulane University Health Sciences Center, Dr. Abdel-Mageed was trained in the field of molecular cancer pharmacology. Special attention was given to identification of genes associated with breast cancer cell growth and their interaction with nuclear transcription factors to mediate their mitogenic responses. In 1997, Dr. Abdel-Mageed joined the Department of Urology at Tulane University Health Sciences Center as an Assistant Professor (tenure-track), an adjunct Assistant Professor of Pharmacology, and founding director of the Molecular Oncology Research Laboratories. Dr. Abdel-Mageed has over 25 peer-reviewed publications and has served on several DOD grant review panels.

Dr. Abdel-Mageed's laboratory primarily focuses on basic research into the cellular and molecular aspects of urologic diseases, with particular attention given to prostate and bladder cancer. The laboratory has a special interest in tumor cell invasion, metastasis, and disease progression. Molecular biology, genetics, cell biology, and biochemical techniques as well as studies involving transgenic TRAMP mouse model (TRAMP) and *in-situ* analysis on human tissues are routinely employed to address questions concerning these issues.

One area of major interest to Dr. Abdel-Mageed is the role of metallothionein in prostate cancer progression, with special emphasis on cell proliferation using antisense technology, and on expression of invasion, angiogenesis and metastasis-related genes using *in-vitro* and *in-vivo* xenograft model systems. He is also examining their expression profile *in situ* to evaluate their correlation with tumor grade and their potential use as biomarker for disease progression. More recently, his laboratory has been conducting studies pertaining to isolation and characterization of *in vivo* differentially expressed genes of prostate cancer as they relate to race, age, and tumor grade using state-of-the-art laser capture microdissection, suppressive subtractive hybridization and DNA microarray technology. Analysis of the expression and function of these genes should allow for a more in depth understanding of the processes controlling prostate cancer cell growth, invasion, and metastasis. Dr. Abdel-Mageed's research interests also include dissection of molecular mechanisms and signaling pathways associated with chem/radioresistance of prostate

cancer. Using a super-repressor I kappa B adenoviral delivery approach, his laboratory is conducting experiments to evaluate the role of inhibiting the activation of the nuclear factor NF-kappa B in enhancing radio/chemosensitization and apoptosis of prostate cancer cells.

#### **DEPARTMENTAL RESPONSIBILITIES:**

- Director, Molecular Oncology Research Laboratories
- To establish molecular biology-based research program and a core facility.
- To collaborate with other faculty in the department and enhance their research using molecular biology tools.
- To teach, train and supervise research of residents, fellows, postdoctoral fellows, medical students and international scholars.
- To attract extramural funding from federal and private foundations.

#### **ACHIEVEMENTS:**

##### **(I) Establishment of Molecular Biology Research Program:**

These include established the following core facilities in the Department of Urology:

**a) Molecular biology & tissue culture research laboratory:** This laboratory is now fully equipped with tissue culture hood, incubator, 2400 Perkin-Elmer thermocycler, Stratagene robocycler, Bio-Rad gene pulser, UV cross-linker, bench centrifuge, microcentrifuges, refrigerators, submarines and vertical electrophoresis units, power supplies, SAVANT speed vac, SAVANT refrigerated centrifuge, gel dryer, UV transilluminator, Revco - 70 freezer,, Bio-Rad electroblotting unit, BioRad electroelution unit, Bio-Rad mini 2D-gel unit, gel documentation systems, & heat-refrigerated water bath incubator.

**(b) Laser Capture Microdissection (LCM) Facility:** This facility is equipped with Arcturus Pixcell II laser capture microdissection. LCM is a new technology originated by NIH for procuring pure cells from specific microscopic regions of tissue sections. Cells of interest in normal or diseased microenvironment that express different genes or proteins and undergo complex molecular changes both in response to internal control

signals can be isolated and compared using LCM. Therefore, microdissection is essential to the application of molecular analysis methods to study evolving disease lesions *in vivo*.

**(c) DNA Microarray Facility:** The genomic facility was established with an enhancement grant for Louisiana Board of Regents (\$ 121,000). This facility is equipped with GeneTAC™LSIV Biochip Analyzer, a high throughput 4-color based imager of microarrays with three internal and one external laser to detect Cy3, Cy5, FITC and Texas Red fluorescent labels, with a built-in automated slide handler for batch imaging of up to 24 slides at a time. The core facility is also equipped with an automated GeneTAc Hybridization Station, a 12 position unit with mutli-software instrument that enables investigators to run up to twelve independent sets of hybridizations.

**(d) Proteomic Facility:** This is composed of MALDI -TOF (Matrix Assisted Laser Desorption Ionization-time-of-flight) mass spectrometer and 2D-gel system. These systems were also funded by an enhancement grant for Louisiana Board of Regents (\$ 40,000) . MALDI-TOF mass spectrometry has rapidly become the technique of choice for the analysis of proteins, peptides, oligonucleotides and synthetic polymers. MALDI delivers the sensitivity, mass resolution, accuracy and high throughput demanded by our Core facility. The system is equipped with software to facilitate data acquisition and mass peak detection for fast and accurate detection, identification and characterization of proteins of interest. Its 1.2 meter flight path, time-lag focusing capability and fast sampling digitizer bring high resolution (up to 2000). The system's ultra-high sensitivity can detect very small quantities (femtomole) of analyte, and with 100 ppm (0.01%) mass accuracy, it can handle many applications. Data can be

saved in a variety of formats for use with third party software like MS Fit, Mascot, Grams, etc. Proteins masses can be matched with proteome database (NCBI, Ensembl) for identification.

**(e) Fluorescence Microscope Facility:** An upgrade of the an existing fluorescence microscope has been upgraded. The system is now equipped with a digital camera, Dell computer and image analysis software.

## **(II) Collaboration with Other Faculty in the Department:**

- Dr. Raju Thomas: Dr. Mageed has supervised the research projects of two endourology fellows working with Dr. Thomas. One has yielded one publication and the other one is under review ( J. Urol.).
  
- Dr. Wayne Hellstrom: Dr. Mageed has collaborated with Dr. Hellstrom, primarily by training, guidance of his research fellows, including three international scholars and medical students. Their findings were published in many journal articles and abstracts.
  
- Dr. Gamal G. Ghoniem, M.D.: Dr. Mageed has initiated research with Dr. Ghoniem in the field of female urology, with special emphasis on interstitial cystitis. These efforts were translated in implication of the nuclear factor kappa B in the pathogenesis of the disease. The results were published in the J. Urol., 1998 and in another publication submitted to Int. J. Urol. and in many published abstracts (see publications and published abstracts).
  
- Dr. Rodney Davis and Dr. Moparty: Dr. Mageed has collaborated with the oncology team, with special reference to RCC and prostate cancer. The efforts were translated into publications, published abstracts and several others currently under review.

- Dr. Suresh C. Sikka: A recent collaboration was established between with Dr. Sikka investigating (a) the role of antioxidants in regulating growth of prostate cancer and BPH cells; (b) cytochrome c oxidase- caspase pathway in LCM-procured BPH cells. Initial results also demonstrate defective caspase pathways due to deletion or down-regulation of subunit 1 and 3 of cytochrome c oxidase in these cells. Result of antioxidant effects were accepted for presentation in the upcoming AUA and AACR meetings and the manuscript was submitted for publication

**(III) Teaching, training and supervising research of residents, fellows, postdoctoral fellows, medical students and international scholars.**

The following has been trained in my laboratory under my supervision:

**Urology Residents and Fellows:**

**Yousef Tadros, M.D.**, an Endourology Fellow 2001-02

Project title: *In vivo* proteomic analysis of differentially expressed cytokines in LCM-procured UPJO hyperplastic urothelial cells using protein chips.” manuscript submitted to J of Urology.

**Gilberto Ruiz-Deya, M.D.**, an Endourology Fellow 2000-01

Project title: “Potential role for the nuclear transcription factor NF- $\kappa$ B in the pathogenesis of ureteropelvic junction obstruction.” Jan-June 2001.(Published in J. Endourol., 2002) .

**Flynn Vincent, Jr, MD.** Tulane Urology Resident (research rotation)

Project Title “Adenovirus-Mediated Inhibition of NF- $\kappa$ B Activation Enhances Chemosensitization and Apoptosis in Prostate Cancer Cells.”

- Publication in Int. J. Oncol., 2003.

- First place: Montague Boyd Essay Contest, to be presented in national meeting in March 2003.

- Dean of School of Medicine Award for Excellence in Research and Presentation by a Resident or Fellow, 2001.

**Andrew Nguyen, MD,** Tulane Urology Resident (Research Rotation).

Project title “Isoform-specific gene expression of metallothionein in renal cell carcinoma. This research work has led him to win following awards:

- Dean of School of Medicine Award for Excellence in Research and Presentation, 1999.
- Tulane/LSU Cancer Interdisciplinary Award, 1999
- AUA Southeastern Section Award, 2000.
- Publication in Cancer Lett, 2000

**Ben Shenassa, MD.,** Tulane Urology Resident

Project title “NF-kappa B-mediated induction of proinflammatory cytokines and chemokines: a possible mechanism in interstitial cystitis.”

- Publication in Urol. Res., 2003.

### **Postdoctoral Fellows:**

**Masood Baig, Ph.D.,** Postdoctoral Fellow. June 2000-2002.

Project title “Identification and characterization of human metastasis-related genes using laser capture microdissection and suppressive subtractive hybridization techniques.”

- His work has led to discoveries of novel prostate cancer metastasis-related genes and was presented in national and international meetings.

**Dinue Jia, M.D., Ph.D.** Postdoctoral fellow. June 2000-present.

Projects title “In vivo differentially expressed genes of prostate cancer: role of age, race and tumor grade.” This project involve the use of LCM, library construction, gene printing and cDNA microarray analysis.

Project title“Role of androgen receptor (AR) in chemo/radiosensitization of prostate cancer cells.” This project examines the molecular mechanisms by which the chemoresistant androgen independent, AR-expressing PC-3 cells become sensitive to anti-cancer drugs and radiation. This work has led Dr. Jia to achieve the following:

- Tulane Cancer Center Award for Cancer Research, 2002.

- Publication in BBRC, 2003.

### **Medical and Graduate Students:**

**Tisheeka Graham: B. Sc.,** an MCB Ph.D. graduate student. Fall, 2002- present.

Project title “Isolation and characterization of human prostate cancer metastasis-related genes.” The candidate will be working towards her Ph.D. in my laboratory.

**Trinity J. Bivalacqua,** Medical Student and Ph.D. candidate (1999-present)

Project title “Pathophysiology of erectile dysfunction in rats.” This work has lead to several publications in the past two years.

**Ali Bajwa,** B.Sc., Medical Student June 00-July 2001.

Project title “Adenovirus-Mediated Inhibition of NF- $\kappa$ B Activation Suppresses Induction of Proinflammatory Cytokines Expression in Bladder Epithelial Cells: Possible Role in Interstitial Cystitis.” Published in Urol. Res., 2003.

Project title: Overexpression of metallothionein in prostate cancer cells induces transcription and activation of MMP-2 and MMP-9.” Manuscript under preparation.

### **International Fellows:**

**Dae-Yul Yang,** M.D., International Visting Scholar. June-Dec, 1999.

Project title: The role of endothelin antagonism for preservation of erectile function in diabetic rats.” June-Dec 2000. This work has resulted in a publication in J. of Androl, 2002.

**J-S Huyn,** M.D. International Visiting Scholar: June 99-July 2000

Project title: Localization of peripheral Dopamine D1 and D2 receptors in rat and human seminal vesicles. Resulted in two puplications (BJU Int. & J. Androl. 2002).

### **(VI) Funding:**

#### **Ongoing Support:**

DOD (Abdel-Mageed, P.I.) 1/1/04-12/31/06  
\$556,00

“Functional characterization of two novel human prostate cancer metastasis-related genes”

TURSG CCE-101610 Abdel-Mageed (P.I.) 1/1/01-12/31/04  
\$865,000

ACS

“In Vivo Differentially Expressed Genes of Prostate Cancer: Role of Race, Age and Tumor Grade”

This study investigates genes that are differentially expressed in prostate cancer in response to age, race and tumor grade using suppressive subtractive hybridization and microarray technology  
Role: P.I.

DOD-PCRP (PC030945) HBCU Collaborative Partnership Award. 1/1/04-12/31/06  
Elizabeth Barron, P.I. \$868,562

“Training HBCU Faculty and Students in Prostate Cancer (PC) Research: Signal Transduction and Receptor-Inhibitor Interactions in Progress of PC.”

Role: Alternate PI, Mentor

LEQSF(2001-02)-ENH-TR-66 Abdel-Mageed (P.I.) 7/1/01-6/30/04  
LEQSF \$160,000

“DNA Microarray System”

This enhancement grant was used to establish a genomic (GeneTAC scanner & Hybridization Station) and proteomic (MALDI mass spectrophotometer) core facility in Tulane Department of Urology.

Role: P.I.

LEQSF Solomonow P.I.(LSU) 7/1/00-6/30/05  
\$75,000

“Occupational Medicine Research Center”

“Post-traumatic Arthritis: Basic Science Model”--Subcontract

The grant objective is to delineate the molecular mechanisms responsible for development of post-traumatic arthritis.

Role: Co-Investigator

NIH (R01): Agrawal, P.I. 7/1/03-6/30/07  
\$1,250,000

“Mechanisms of HAART-Induced Endothelial Dysfunction”

Role: Co-Investigator

### **Completed Research Support**

NIH R03-DK54971-02 Abdel-Mageed (P.I.)

9/30/98-3/30/02  
\$173,258

“Role of metallothionein in prostate tumorigenesis”

This grant investigates the potential role of metallothioneins in modulation of genes responsible of prostate cancer progression.

Role: P.I.

DOD Abdel-Mageed (P.I.)

1/15/99-7/15/99  
\$49,721

US Army

“Antisense down-regulation of metallothionein: a therapeutic approach for prostate cancer”

The objective of this grant proposal was to examine the efficacy of metallothionein antisense andeovirus vector in inducing growth arrest and apoptosis of prostate cancer cells

Role: P.I.

Pfizer (S.C. Sikka)

6/1/2002-5/31, 2003  
\$50,000

“Genetic Determinants in Human Cavernal Tissue of Diabetic Impotent Patients Who Failed Viagra”

Role: Co-Invest.

#### **PENDING SUPPORT:**

NIH (R01): Abdel-Mageed, P.I.

“Cross-talk between NF-kappa B and Androgen Receptor: Role in Resistance in Prostate Cancer”

NIH (R01): Abdel-Mageed, P.I.

“Antiapoptotic Signaling Pathways of NF-kappa B-Induced Chemo/Radioresistance in Prostate Cancer

#### **OTHER MEDICAL SCHOOL ACTIVITIES:**

#### **FACULTY APPOINTMENTS**

- Associate Professor of Urology, 1997-present
- Adjunct Associate Professor of Pharmacology, 1998-present
- Faculty, Molecular and Cellular Biology Graduate Program, TUHSC, 1998-present.
- Program Member, Tulane Cancer Center, TUHSC, New Orleans, LA, 1998-present

#### **TEACHING:**

*Cellular Control Mechanisms*, ( 3credit hrs, Pharm. 705

Topics include two classes in (a) regulation of apoptosis and (b) regulation of cell growth and differentiation.

*Pharmacological Research* (2 credit hrs, Pharm 750)

Topics include three classes in (a) DNA recombinant technology, (b) Electrophoresis techniques; and (c) Immunodetection techniques

*Molecular Basis of Disease* (3 credit hrs, MCBP 777-02)

Topics include four classes in (a) molecular markers and growth signaling pathway, (b) targets for cancer therapy; (c) invasion and metastasis; and (d) literature review.

*MCB Research Methods* (2 credit hrs, MCBP-712-01)

Topics include one class about my current research activities.

*Clinical Pharmacology- Medical Students* (3 credit hrs)

Topic: Various topics using problem-based learning

Topic: Anticancer drugs lab- (unknowns)

**GRADUATE STUDENT COMMITTEES**

- Tihseeka Graham, Ph.D. student, MCB graduate program, July 2002-present (Mentor, **Dr. Abdel-Mageed**).
- Christopher Williams, Ph.D. Graduate Student, Pharmacology, 1998-present (Mentor, Dr. Agrawal).
- Trinity J. Bivalacqua, Ph.D. Graduate Student, Pharmacology, 2001-present (Mentor, Dr. Kadwitz).
- Ling Lia, Ph.D. Graduate Student, MCB graduate program, 1999-present (Mentor, Dr. Hill).
- Kendra Jupiter, Ph.D. Graduate Student, MCB graduate program, 2002-present, (Mentor, Dr. Flemington)
- Scott F. Eckert, MS Student, Pharmacology 1999-2000, (Mentor, Dr. Beckman).
- Arianne Ferguson, MS Student, Pharmacology June 01-July 02, (Mentor, Dr. Beckman)

**OTHER ACADEMIC/ADMINISTRATIVE ACTIVITIES:**

- Co-Director, Tulane Cancer Center Seminar series, 1999-2001

- Judge, Tulane Cancer Center Interdisciplinary Cancer Workshop, 2000
- Judge (reviewer), Morris F. Shaffer Award, 1999, 2000
- Judge (reviewer), Annual Tulane Health Sciences Research Days, 2001, 2002.
- MCB Clinical Sciences Subcommittee, 2000.
- Urology Residency candidate interview, 1997-present
- Organized a workshop on “Genomics & Proteomics”, Dept. of Urology, May 2002.
- MCB graduate student applicant interview.
- Judge (reviewer), Annual Tulane Health Sciences Research Days, 2003.
- Tulane/LSU Cancer Consortium Task Force-- Cell Analysis Core, 2003.
- Co-Moderator, Poster Discussion Session, Tulane Health Research Days, 2003.
- TUHSC Institutional Animal Care and Use Committee (IACUC), 2002-2005.

### **PUBLICATIONS:**

Rodney Davis, Dingwu Jia, Bekir Cinar, Suresh. C. Sikka, Krishnarao Moparty, Haiyen E. Zhau, Leland W. Chung, Krishna.C. Agrawal and **Asim. B. Abdel-Mageed**. Functional Androgen Receptor Confers Sensitization of Androgen Independent Prostate Cancer Cells to Anticancer Therapy Via Caspase Activation Biochem. Biophys. Res. Commun., 309(4):937-45, 2003.

Y. Tadros, G. Ruiz-Deya, B.E., Crawford, R. Thomas and **A.B. Abdel-Mageed**. *In vivo* proteomic analysis of cytokine expression in laser capture-microdissected urothelial cells of obstructed ureteropelvic junction procured by laparoscopic dismembered pyeloplasty. J Endourol. 17(5):333-6, 2003.

Flynn Vincent, Jr., A, Ramanitharan, K. Moparty, R. Davis, Krishna C. Agrawal, **Asim B. Abdel-Mageed**. Adenovirus-mediated inhibition of NF-kappaB confers chemosensitization and apoptosis in prostate cancer cells via activation of caspase pathway. Int. J. Oncol., 23: 317-23, Aug 2003.

Ali Bajwa, Behnam B. Shenassa, Liset Human, Gamal Ghoneim and **Asim B. Abdel-Mageed**. Adenovirus-Mediated Inhibition of NF- $\kappa$ B Activation Suppresses Induction of Proinflammatory Cytokines Expression in Bladder Epithelial Cells: Possible Role in Interstitial Cystitis. Urol. Res., 31:300-305, 2003.

**Asim B. Abdel-Mageed**, F. Zhao, B. Rider and K.C. Agrawal. Erythropoietin-induced metallothionein gene expression: role in proliferation of K562 cells. Exp. Bio. Med., 228: 1033-39, 2003.

Bivalacqua TJ, Usta MF, Champion HC, Adams D, Namara DB, **Abdel-Mageed AB**, Kadowitz PJ, Hellstrom WJ. Gene transfer of endothelial nitric oxide synthase partially restores nitric oxide synthesis and erectile function in streptozotocin diabetic rats. *J Urol.*,169(5):1911-7, 2003.

Leungwattanakij S, Bivalacqua TJ, Usta MF, Yang DY, Hyun JS, Champion HC, **Abdel-Mageed AB**, Hellstrom WJ. Cavernous neurotomy causes hypoxia and fibrosis in rat corpus cavernosum. *J Androl.*, 24(2):239-45, 2003.

Bivalacqua TJ, Armstrong JS, Biggerstaff J, **Abdel-Mageed AB**, Kadowitz PJ, Hellstrom WJ, Champion HC. Gene transfer of extracellular SOD to the penis reduces O<sub>2</sub>-\* and improves erectile function in aged rats. *Am J Physiol Heart Circ Physiol.*, 284(4):H1408-21, Apr 2003. Epub 2002 Dec 27.

G.Ruiz-Deya, S. C. Sikka, R. Thomas and **A.B. Abdel-Mageed**. Potential role for nuclear transcription factor NF- $\kappa$ B in the pathogenesis of ureteropelvic junction obstruction. *J. Endourol.*, 16:611-615, 2002.

M.A.Eid, R.W. Lewis, **A. B. Abdel-Mageed** and M.V. Kumar. Reduced response of prostate cancer cells to TRAIL is modulated by NF-kappa B-mediated inhibition of caspases and Bid activation. *Int. J. Oncol.*, 21(1):111-7, 2002.

J-S Huyn, T. Bivalacqua, M. R. Baig, D-L Yang, S. Leungwattanakij, **A. B. Abdel-Mageed**, K. D. Kim, and W.J.G. Hellstrom. Localization of peripheral dopamine D1 and D2 receptors in rat corpus cavernosum. *B.J.U. Int.*, 90:105-12, 2002.

J-S Huyn, M. Baig, D-L Yang, S. Leungwattanakij, K-D, Kim, **A. B. Abdel-Mageed** and W.J.G. Hellstrom. Localization of peripheral Dopamine D1 and D2 receptors in rat and human seminal vesicles. *J Androl.*, 23(1):114-20, 2002.

Flynn Vincent, Jr., Liset Human, Suresh Sikka, Rodney Davis, Krishna C. Agrawal, **Asim B. Abdel-Mageed**. Adenovirus-Mediated Inhibition of NF- $\kappa$ B Enhances Chemosensitization and Apoptosis in Prostate Cancer Cells. *Euro. J. Cancer.* 37: 86, 2001.

T. J. Bivalacqua, H. C. Hunter, A.B. **Abdel-Mageed**, P.J. Kadowitz & W.J.G. Hellstrom. Gene transfer of prepro-calcitonin gene-related peptide restores erectile function in aged rat. *Biol. Reprod.*, 65(5):1371, 2001.

T.J. Bivalacqua, C.H. Champion, Leugwattankij, S., Yang, D.Y., Hyun, J.S., **A.B. Abdel-Mageed**, S.C. Sikka, P.J. Kadowitz, W.J. Hellstrom. Evaluation of nitric oxide synthase and arginase in the induction of a peyronie's-like condition in the rat. *J. Androl.*, 22:497-506, 2001.

A., Nguyen, Z. Jing, S. Mahoney, R. Davis, S. Sikka, K.C. Agrawal and **A. B. Abdel-Mageed**:. *In vivo* gene expression profile analysis of metallothionein in renal cell carcinoma.. *Cancer Lett.*, 160:133-140, 2000.

T.J. Bivalacqua, H.C. Champion, Y.S. Mehla, **A.B. Abdel-Mageed**, L.J. Ignarro, P.J. Kadowitz and W.J.G. Hellstrom. Adenoviral transfer of endothelial nitric oxide synthase (eNOS) to the penis improves age-related erectile dysfunction. *Int. J. Impotence Res.*, 12: S1-S10, 2000.

T. Hussain, **A. B. Abdel-Mageed**, A. M. Miller, L. Levy and K.C. Agrawal: A novel metallothionein gene therapy approach for chemo- and radioprotection. *Metallothionein*, 4:595-600, 1999.

**A. B. Abdel-Mageed** and Krishna C. Agrawal: Activation of nuclear factor kappa B: potential role in metallothionein-mediated mitogenic response. *Cancer Res.*, 58:2335-8, 1998.

**A. B. Abdel-Mageed** and G. M. Ghoniem: Potential role of NF-kappa B on pathogenesis of interstitial cystitis. *J. Urology*, 160:2000-2003, 1998.

**A. B. Abdel-Mageed** and R. Davis: Isoform-specific gene expression of metallothionein in prostate cancer: potential role in disease progression. *Cancer Detection and Prevention*. 22:188, 1998.

**A. B. Abdel-Mageed** and Krishna C. Agrawal. Antisense down-regulation of metallothionein induces growth inhibition and apoptosis in human breast carcinoma MCF7 cells. *Cancer Gene Therapy*. 4:199-207, 1997.

**A. B. Abdel-Mageed**, R. Welti, F. W. Oehme and J. A. Pickrell: Perinatal hypocuprosis effects on synthesis and composition of neonatal lung collagen and surfactant. *American J. Physiol. (Lung Cell Mol. Physiol.)*, 11:L679-685, 1994.

**A. B. Abdel-Mageed** and F. W. Oehme: The effect of various dietary zinc concentrations on the biological interactions of zinc-copper-iron in rats. *Biol. Trace Elem. Res.*, 29:239-56, 1991.

**A. B. Abdel-Mageed**, B. Abbas and F.W. Oehme: The pathogenesis of foreign-body pica syndrome in goats. *Agri-Practice*, 12:31-35, 1991.

**A. B. Abdel-Mageed** and F. W. Oehme: A review on the biochemical roles, toxicity and interactions of zinc, copper and iron: I Zinc. *Vet. Hum. Toxicol.*, 32(1):34-39, 1990.

**A. B. Abdel-Mageed** and F. W. Oehme: A review on the biochemical roles, toxicity and interactions of zinc, copper and iron: II Copper. *Vet. Hum. Toxicol.*, 32(3):230-34, 1990.

**A. B. Abdel-Mageed** and F. W. Oehme: A review on the biochemical roles, toxicity and interactions of zinc, copper and iron: III Iron. *Vet. Hum. Toxicol.*, 34(4):324-28, 1990.

**A. B. Abdel-Mageed** and F. W. Oehme: A review on the biochemical roles, toxicity and interactions of zinc, copper and iron: IV Interactions. *Vet. Hum. Toxicol.*, 32(5):456-58, 1990.

**A. B. Abdel-Mageed**, Alamin M. Al-Zubeir and F. W. Oehme: The possible role of *actinomyces pyogenes* in ovine abortion. *Agri-Practice*. 14:36-38, 1993.

Abbas B., Idris S.E.O., and **A. B. Abdel-Mageed**. Isolation of *mycobacterium paratuberculosis* from goats in the Sudan. *Sudan J. Vet. Sci. Anim. Husb.*, 25:81-86, 1984.

#### **PUBLICATIONS UNDER REVIEW:**

#### **MANUSCRIPTS UNDER PREPARATION:**

Ali Bajwa, M. Baig, L. Human, R. Davis, K.C. Agrawal and **Asim B. Abdel-Mageed**. Overexpression of metallothionein induces transcription and activation of MMP-2 and MMP-9 in prostate cancer cell lines. (to be submitted to BBRC).

S.C. Sikka, R. Davis and **A. B. Abdel-Mageed**. Differential cellular proliferation and apoptosis of human prostate cells (benign and malignant) in response to oxidative stress and antioxidants. (to be submitted to Cancer Res).

D. Jia, R. Davis, S. Sikka, K.C. Agrawal and **A. B. Abdel-Mageed**. Restoration of functional AR in androgen independent prostate cancer cells suppresses NF- $\kappa$ B activation. (to be submitted to JBC).

## **INVITED LECTURESHIP & PUBLISHED ABSTRACTS**

### **LOCAL**

Molecular Determinants of Racial Disparity in Prostate Cancer Incidence and Mortality. American Cancer Society Relay For Life Rally, Lafayette, LA, Oct. 2003.

“Isolation and characterization of genes responsible for bi-racial differences in incidence and mortality of prostate cancer.” ACS Research Tour, LSUHSC, May, 2002.

“NF-kappa B activation: possible role in androgen receptor repression-induced chemo/radioresistance in prostate cancer cells.” Signal Transduction Workshop, TUHSC, 2002.

“Mutual repressive interaction between androgen receptor and NF-kappa B in mediating therapeutic resistance in prostate cancer.” Department of Medicine, TUHSC, 2002.

“Characterization of novel metastatic prostate cancer related genes” Tulane Cancer Center, TUHSC, 2001.

“Role of NF-kappa B in chemoresistance and progression of prostate cancer.” Department of Structural & Cellular Biology, TUHSC, 2001.

“Activation of NF-kappa B: role in metallothionein-induced mitogenic response.” Department of Pathology, TUHSC, 1999.

“Induction of metallothionein gene expression by erythropoietin: role in proliferation and erythroid-specific differentiation.” Department of Pharmacology, TUHSC, 1998.

### **NATIONAL & INTERNATIONAL:**

Invited Speaker, “ Prostate Cancer Genomics”. Health Disparity Symposium, Tuskegee University, Tuskegee, AL, June 2003.

Invited Speaker, “Genetic determinant of biracial disparity of prostate cancer”, American Cancer Society Relay For Life Rally, Lafayette, LA - - Hilton Towers, October, 2003.

R. Davis, D. Jia, B. Cinar, S. C. Sikka, K. Moparty, H. E. Zhau, L.W. Chung, K.C. Agrawal and A. B. Abdel-Mageed. Re-expression of functional androgen receptor in PC-3 cells confers sensitization to radiation and anticancer drugs. Proc. Amer. Assoc. Cancer Res., 44:353, 2003 (AACR meeting, Washington, DC, July 2003).

P. Kukreja, D. Mondal, **A. B. Abdel-Mageed**, B. Rider and K.C. Agrawal. TNF- $\alpha$  suppresses SDF-1 $\alpha$  induced adhesion and transendothelial migration (TEM) of prostate cancer (PC-3) cells. Proc. Amer. Assoc. Cancer Res., 44:452, 2003 (AACR meeting, Washington, DC, July 2003).

Visiting Professor, "Molecular and genomic approaches in the detection of therapeutic resistance and progression of human prostate cancer." Zhengzhou University School of Medicine, China (Oct 10-17, 2002).

Invited Speaker, "Molecular determinants of resistance and progression of prostate cancer.", Invited seminar speaker, Department of Biology, Jackson University, Jackson, MS, November, 2002.

Invited by ACS to give a presentation at the 18<sup>th</sup> International Cancer Congress, Oslo, Norway. **A. B. Abdel-Mageed**, M. Baig, L. Human, A. Bajwa, R. Davis. *In vivo* gene expression profile analysis of human metastatic prostate cancer. (Int. J. Cancer: Suppl 13:161, 2002).

M. Baig, L. Human, A. Bajwa, R. Davis, **A. B. Abdel-Mageed**. *In vivo* differential expression analysis of novel metastatic prostate cancer genes. AACR meeting, San Francisco (Proc. Amer. Assoc. Cancer Res., 43:116, 2002).

G. Ruiz-Deya, S.C. Sikka, Y. Tadros, R. Thomas, **A. B. Abdel-Mageed**. Potential role for the nuclear transcription factor NF- $\kappa$ B in the pathogenesis of ureteropelvic junction obstruction. AUA meeting, Orlando, FL (J. Urol., 167:S96, 2002).

S.C. Sikka, R. Davis and **A. B. Abdel-Mageed**. Differential cellular proliferation and apoptosis of human prostate cells (benign and malignant) in response to oxidative stress and antioxidants. AUA meeting, Orlando, FL (J. Urol., 167:S221, 2002).

S. C. Sikka, R. Davis, K. Moparty, D. Schwinn and **A. B. Abdel-Mageed**. Oxidative stress induces differential cell proliferative response in benign and malignant prostate cells. AACR meeting, San Francisco (Proc. Amer. Assoc. Cancer Res., 43:116, 2002).

Y.S. Mehta, T.J. Bivalacqua, D. Sarma, K. Moparty, R. Davis, **A. B. Abdel-Mageed** and S.C. Sikka. Differential expression of nitric oxide synthase isoforms in human prostate (BPH, prostate carcinoma and normal) tissue. J. Andro., 23:S47, 2002.

Flynn Vincent, Jr., Diane Weber, Liset Human, Suresh Sikka, Rodeny Davis, and **A. B. Abdel-Mageed** Adenovirus-Mediated Inhibition of NF- $\kappa$ B Activation Potentiates Chemosensitization and TNF- $\alpha$ -Induced Apoptosis in Prostate Cancer Cells. AACR Special Conference, Hawaii, 2002.

Masood Baig, Liset Human, Ali Bajwa, Rodney Davis and **A. B. Abdel-Mageed**: *In vivo* Gene Expression Profile Analysis of Metastatic Prostate Cancer Using Laser capture microdissection

(LCM) and PCR-Based Suppressive Subtractive Hybridization (SSH).<sup>4</sup><sup>th</sup> International Cancer Conference, United Arab Emirates, 2001.

V. Flynn, Jr., L. Human, S. Sikka., R. Davis, and **A. B. Abdel-Mageed**. Adenovirus-mediated inhibition of NF-kappa B promotes chemosensitization and apoptosis in prostate cancer cells. *Eur. J. Cancer*, 37(Suppl):S86, 2001. ( Biological Therapy of Cancer Meeting, Germany)

T.J. Bivalacqua, H.C. Champoin, S. Leungwattanakij, D. Yang, S.C. Sikka, **A.B. Abdel-Mageed** and W.J.G. Hellstrom. Adenovirus gene transfer of endothelial nitric oxide synthase to rat penis improves diabetic-related erectile dysfunction. *J. Urol.*, 165:221, 2001.

D. Yang, T.J. Bivalacqua, J. Hyun, S. Leungwattanakij, M. Baig, S.C. Sikka, **A.B. Abdel-Mageed** and W.J.G. Hellstrom. The role of endothelin antagonism for preservation of erectile function in diabetic rats. *J. Urol.*, 165:222, 2001.

J. Hyun, T.J. Bivalacqua, D. Yang, M. Baig, **A.B. Abdel-Mageed**, R. Davis, and W.J.G. Hellstrom. Localization of dopamine D1 and D2 receptor mRNA and proteins in rat and human corpus cavernosum. *AUA*, 2001.

D. Yang, T.J. Bivalacqua, J. Hyun, S.C. Sikka, M. Baig, **A.B. Abdel-Mageed**, and W.J.G. Hellstrom. The role of endothelin antagonism for preservation of erectile function in diabetic rats. *J. Urol.*, 165:230, 2001.

J. Hyun, T.J. Bivalacqua, D. Yang, M. Baig, **A.B. Abdel-Mageed**, R. Davis, and W.J.G. Hellstrom. Localization of dopamine D1 and D2 receptor mRNA and proteins in rat and human seminal vesicles. *J. Urol.*, 165:338, 2001

A., Nguyen, Z. Jing, S. Mahoney, R. Davis, S. Sikka, K.C. Agrawal and **A. B. Abdel-Mageed**: Isoform-specific gene expression of metallothionein in renal cell carcinoma. *J. Urol.*, 163:117, 2000.

L. Human, R. Davis, and **A.B. Abdel-Mageed**. Role of metallothionein in prostate cancer progression. *Proc. Amer. Assoc. Cancer Res.*, 41:432, 2000.

**A. B. Abdel-Mageed**, G. Ghoneim, L. Human and K.C. Agrawal. Induction of proinflammatory cytokine gene expression by NF- $\kappa$ B in human bladder epithelial (T24) cells: possible mechanism for interstitial cystitis. *J. Urol.*, 161:26, 1999.

T. Hussain, **A. B. Abdel-Mageed**, L. Levy, A. Miller, and K.C. Agrawal. A novel gene therapy approach for protection of the bone marrow with the human metallothionein gene. *Proc. Am. Assoc. Cancer Res.*, 40:595, 1999.

T. J. Bivalacqua, S. K. Purohit, A. J.R. Glass, M. Rajasekaram, **A.B. Abdel-Mageed**, S. Sikka and J.G. Hellstrom. Potential role of NF- $\kappa$ B in the induction of Peyronie's-like syndrome. *J. Urol.*, 161:204, 1999.

S. K. Purohit, T. J. Bivalacqua, L. Minor, M. Rajasekaram, **A.B. Abdel-Mageed**, S. Sikka and J.G. Hellstrom. Increased collagen type I and III fibers in the Peyronie's disease rat model. *J. Urol.*, 161:218, 1999.

**A. B. Abdel-Mageed**, G. Ghoneim, L. Human and K.C. Agrawal. Induction of proinflammatory cytokine gene expression by NF- $\kappa$ B in human bladder epithelial (T24) cells: possible mechanism for interstitial cystitis. *J. Urol.*, 161:26, 1999.

T. Hussain, **A. B. Abdel-Mageed**, L. Levy, A. Miller, and K.C. Agrawal. A novel gene therapy approach for protection of the bone marrow with the human metallothionein gene. Proc. Am. Assoc. Cancer Res., 40:595, 1999.

Sikka, R. Sharma, **A. B. Abdel-Mageed**, W. G. Hellstrom. Oxidative stress induces NF-kappa B activation in isolated human cavernosal cells: role in the pathophysiology of erectile dysfunction. Free Rad. Biol. Med, 27: S156, 1999.

**A. B. Abdel-Mageed** and R. Davis: Isoform-specific gene expression of metallothionein in prostate cancer: potential role in disease progression. Cancer Detection and Prevention. 22 (Suppl 1):S188, 1998.

**A. B. Abdel-Mageed** and G. M. Ghoniem: Potential Etiological Role of Rel/NF- $\kappa$ B in Interstitial Cystitis. NIDDK/ICA Meeting, Arlington, VA, October, 1997.

**A. B. Abdel-Mageed** and K. C. Agrawal. Activation of NF-kappa B: A potential mechanism for metallothionein-induced cellular proliferation. Proc. Amer. Assoc. Cancer Res., 38:447, 1997.

F. Zhao, **A. B. Abdel-Mageed** and K. C. Agrawal. Radioprotective effects of metallothionein in a monocytic progenitor cell line. Radiation Research Society-45th Annual Meeting, RI, 1997.

T. Husain, **A. B. Abdel-Mageed**, L. Levy and K. C. Agrawal: A novel gene therapy approach for the protection of bone marrow by utilizing the human metallothionein gene. 4<sup>th</sup> International Meeting on Metallothionein, KS, 1997.

**A. B. Abdel-Mageed** and K. C. Agrawal: Antisense down-regulation of metallothionein induces growth arrest and apoptosis in human breast carcinoma cells. Cancer Gene Therapy (Suppl), 3(6):S35, 1996.

**A. B. Abdel-Mageed** and K.C. Agrawal. Blockade of metallothionein gene expression by an antisense oligomer causes inhibition of proliferation of human breast carcinoma (MCF7) cells. Proc. Amer. Assoc. Can Res. 37:351, 1996.

Agrawal K. C., **A. B. Abdel-Mageed**, J. Schmidt, X. Khou and V. Kishore. Radioprotective effects of a three drug combination, misoprostol, iloprost and the detoxified monophospholipid. K.C. Radiation Research Society-44th Annual Meeting, Chicago, 1996.

Peroshi, S. L., **A. B. Abdel-Mageed** and K.C. Agrawal. Enhanced expression of metallothionein gene associated with erythropoietin-induced proliferation and differentiation. Proc Amer. Assoc. Caner Res. 36:47, 1995.

Agrawal K.C, Rider B.J., Gogu S.R., and **A. B. Abdel-Mageed**. Prevention of chemotherapy-induced myelosuppression upon induction of metallothionein in bone marrow cells. 6th Annual Basic Science Research Day, Tulane University, 1994.

**A. B. Abdel-Mageed**, F. W. Oehme and J.A. Pickrell. Perinatal effects of iron-, ascorbate-induced hypocuprosis: Implications for sudden infant death. SOT meeting, New Orleans, 1993.

**A. B. Abdel-Mageed**, F. W. Oehme and J.A. Pickrell. An *in vivo* and *in vitro* pulmonary biochemical alterations caused by iron-, ascorbate-induced hypocuprosis: Implications for sudden infant death. Trace element metabolism during development. Georgetown Univ Medical Center, Washington, DC, 1992.

**A. B. Abdel-Mageed** and F. W. Oehme. The biological interactions of zinc-copper-iron in rats. American College of Toxicology, Orlando, FL, 1990.

**BOOK CHAPTERS:**

John A. Pickrell and **Asim B. Abdel-Mageed**. Radiation-Induced Pulmonary Fibrosis. Pulmonary Fibrosis. Lung Biology in Health and Disease Series, Vol 80, Mercel Dekker, 1995.