

Dr. Jean J. Sparks

Texas A&M University-Corpus Christi
Science & Engineering, Life Sciences

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Education

PhD, Texas Woman's University, 1993.

MS, Corpus Christi State University, 1985.

BS, Sam Houston State University, 1977.

Licensures and Certifications

ASCP Board of Registry, American Society for Clinical Pathology. (1977 - Present).

Professional Employment

Lab Manager, Texas A&M Institute for Preclinical Studies. (June 2007 - August 2009).
Developed a clinical veterinary research laboratory by selecting and ordering equipment, establishing quality control measures, SOP manuals, validation protocols for each piece of equipment, proficiency testing

Senior Scientist, Lexicon Genetics, Inc. (December 2000 - January 2007).
Managed the target validation clinical lab, behavior lab, blood pressure and fertility labs

Education Coordinator/Assistant Professor, University of Texas Southwestern School of Allied Health Sciences. (August 1992 - December 2000).
Responsible for overseeing the academic and clinical education of the medical technology students enrolled in the program; taught junior and senior level Clinical Hematology

Administrative Appointments

Director (2009 - Present)
Responsible for overseeing the daily activities of students enrolled in the BIMS CLS program; making recommendations for course changes; clinical assignments for students and faculty as well as the development of new courses and activities to strengthen the program

Professional Memberships

American Society for Clinical Laboratory Sciences
Texas Association of Clinical Laboratory Scientists

TEACHING

Teaching Experience

BIMS 3102, ESSENTIALS LAB FOR CLIN LAB SC
BIMS 3202, ESSENTIALS FOR APPLIED LAB SCI
BIMS 4182, SEMINAR-CLINICAL CORRELATIONS

BIMS 4297, PROFESSIONAL PRACTICUM I
BIMS 4325, CLINICAL CHEMISTRY I
BIMS 4326, CLINICAL CHEMISTRY II
BIMS 4332, CLINICAL IMMUNOLOGY II
BIMS 4365, HEMATOLOGY I
BIMS 4366, HEMATOLOGY II
BIMS 4380, INTRO TO THE CLIN LAB PROFESSI
BIMS 4382, ADVANCED MEDICAL LAB PROCEDURE
BIMS 4384, PROF SKILLS FOR CLIN LAB SCI
BIMS 4396, DIS: Introduction to Clinical Laboratory Sciences
BIMS 4420, HEMATOLOGY
BIMS 4430, CLINICAL IMMUNOLOGY
BIMS 4598, PROFESSIONAL PRACTICUM II
BIOL 4396, DIS: Introduction to structure, function and application of plants with laboratory emphasis utilizi

SCHOLARLY AND CREATIVE ACTIVITIES

Publications

Refereed

Journal Articles

Mehon, N., Sparks, M. J., Omoruyi, F. O. (2016). Oxidative Stress Parameters and Erythrocyte membrane Adenosine Triphosphatase Activities in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe Pinnata Leaves. *Pharmacognosy Research*, 8(2), 85-88. www.phcogres.com

Liddell, P. W., Sparks, M. J. (2012). Murine Typhus: endemic Rickettsia in Southwest Texas. *Clinical Laboratory Science*, 25(2), 81-87. www.ascls.org

Non-Refereed

Abstract

Menon, N., Eng, Y., Mercado, A., Sparks, M. J., Omoruyi, F. O. (2014). *Anti-diabetic Activity and Inflammatory Response in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves*. AACC Abstract # 439.

Presentations

Nguyen, K. (Author & Presenter), Sparks, M. J. (Author), Omoruyi, F. O. (Author), "Effects of Ligusticum porteri on Human Peripheral Lymphocytes," Conference, American Society for Clinical Laboratory Science Annual Meeting, Atlanta. (2015).

menon, n. (Author & Presenter), Sparks, M. J., Omoruyi, F. O., "Serum Lipid Levels and Oxidative Stress Parameters in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves," NASCE 2015 Conference, North American Society of Comparative Endrology, Canada. (June 2015).

Menon, N., Eng, Y., Mercado, A., Sparks, M. J., Omoruyi, F. O., "Anti-diabetic Activity and Inflammatory Response in Streptozotocin-induced Diabetic Rats Administered Aqueous

Preparation of Kalanchoe pinnata Leaves," AACC Annual Meeting, American Association for Clinical Chemistry, Chicago. (2014).

Eng, Y. (Author & Presenter), Mercado, A. (Presenter), Menon, N. (Presenter), Sparks, M. J. (Other), Omoruyi, F. O. (Other), ". "Evaluation of Kalanchoe pinnata aqueous extract in streptozotocin-induced diabetic rats.," Texas A&M System Thirteenth Annual Undergraduate Research Symposium, Texas A&M-Corpus Christi, Corpus Christi. (2013).

Sparks, M. J. (Other), "Serum Proteins and Inflammatory Response in Streptozotocin-induced Diabetic Rats Administered Aqueous Preparation of Kalanchoe pinnata Leaves," Texas A&M University System Eleventh Annual Pathways Student Research Symposium, Texas A&M-Kingsville, Kingsville. (November 2013).

Sparks, M. J. (Author & Presenter), "Hematology Case Studies," Texas Association of Clinical Laboratory Sciences, ASCLS, Austin, Texas. (March 2013).

Sparks, M. J. (Author & Presenter), "He's Got What? A Case Study," Texas Association of Clinical Laboratory Science, TACLS, Ft. Worth, Texas. (March 2012).

Sparks, M. J. (Author), Bhakta, V. (Author & Presenter), Jalpal, P. (Author), "Genotoxic Effects of Tinctures of Spilanthes acmella on Allium cepa," Texas Association of Clinical Laboratory Sciences, TACLS, Austin, Texas. (March 2011).

Sparks, M. J. (Other), Frazier, S. J. (Author & Presenter), "Gentoxic Effects of Four Common Herbal Tinctures," Sigma Xi Undergraduate Research Symposium, Sigma Xi, TAMU-CC. (September 2010).

Contracts, Grants and Sponsored Research

Grant

Sparks, Mary Jean (Co-Principal), Omoruyi, Felix O (Principal), "Kalanchoe pinnata Preparation in the Treatment of Type 2 Diabetes," Sponsored by ASCLS, Private, \$5,000.00. (June 2014 - June 2015).

Sparks, Mary Jean (Co-Principal), Omoruyi, Felix O (Principal), "Mode of Action of Kalanchoe Pinnata Aqueous Extract in," Sponsored by University Research Enhancement Grant, Texas A&M University-Corpus Christi, \$5,000.00. (December 2012 - June 2013).

Sparks, Mary Jean (Principal), "In Vitro Safety Assessment of the Effect of Ligusticum porteri (Osha) on Human Lymphocytes," Sponsored by TAMU-CC, Texas A&M University-Corpus Christi, \$5,000.00. (June 1, 2012 - May 31, 2013).

Sparks, Mary Jean, "Cytotoxic and Genotoxic Effects of a Traditional Herbal Remedy," Sponsored by EARDA, Federal, \$9,000.00. (July 2010 - June 2011).

Sparks, Mary Jean (Principal), "Cytotoxic and Genotoxic Effects of Aqueous Extracts of Four Common Medicinal Herbs on Allium cepa," Sponsored by TAMU-CC, Texas A&M University-Corpus Christi, \$3,700.00. (November 2009 - August 2010).

SERVICE

Department

Committee Member, Search Committee, LSCI Chair. (2015).
Committee Member, Life Sciences Undergraduate Curriculum Committee. (September 2009 - May 2011).

College

Committee Member, COSE Steering Committee. (2015 - Present).
Committee Member, Health Professions Advisory Committee. (April 2011 - Present).
BIMS Faculty Representative and Speaker, Island Days. (September 2009 - Present).
Committee Member, Search Committee for LSCI Advisor. (2015).

University

Committee Chair, Institutional Animal Care and Use Committee. (September 2014 - September 2016).
Committee Member, Institutional Animal Care and Use Committee. (September 2013 - August 2014).
Committee Member, Institutional Research Board. (September 2009 - August 2014).

Professional

Prepared new powerpoint presentations for McKenzie Clinical Hematology textbook. (April 2014 - Present).
Member, American Society Clinical Laboratory Science. (June 2010 - Present).
Officer, Treasurer, Texas Association of Clinical Laboratory Science. (June 2015 - May 2018).
Attendee, Meeting, National American Society of Clinical Laboratory Science Conference. (July 2015).
Committee Chair, Texas Association for Clinical Laboratory Sciences. (November 2013 - April 2014).
Reviewer, Textbook, Pearson Publishers. (November 2012 - February 2013).
Task Force Member, National Accrediting Agency for Clinical Laboratory Science. (October 2012 - November 2012).

Public

Presenter, Coastal Bend Health Education Center. (February 2016 - Present).
Member, Coastal Bend Blood Center Advisory Board. (2011 - Present).
Board Member, Botanical Gardens. (January 2010 - Present).
Board Member, Del Mar Community College MLT Advisory Board. (2010 - Present).
Participate in annual summer camp and workshop, TAMU Health Science Center Coastal Bend Health Education Center. (2010 - Present).