

## Virginia Commonwealth University VCU Scholars Compass

School of Nursing Publications

School of Nursing

2013

## Epigenetics in Research and Practice

Debra E. Lyon Virginia Commonwealth University, delyon@vcu.edu

Susan G. Dorsey University of Maryland

Leorey Saligan National Institute of Nursing Research

Follow this and additional works at: http://scholarscompass.vcu.edu/nursing\_pubs

Part of the <u>Nursing Commons</u>

Copyright © 2013 Debra E. Lyon et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Downloaded from

http://scholarscompass.vcu.edu/nursing\_pubs/10

This Article is brought to you for free and open access by the School of Nursing at VCU Scholars Compass. It has been accepted for inclusion in School of Nursing Publications by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.



## *Editorial* **Epigenetics in Research and Practice**

## Debra E. Lyon,<sup>1</sup> Susan G. Dorsey,<sup>2</sup> and Leorey Saligan<sup>3</sup>

<sup>1</sup> Virginia Commonwealth University, School of Nursing, Richmond, VA 23298, USA

<sup>2</sup> University of Maryland School of Nursing, Baltimore, MD 21201, USA

<sup>3</sup> National Institute of Nursing Research, National Institutes of Health, Bethesda, MD 20892-1506, USA

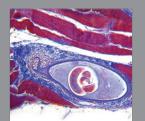
Correspondence should be addressed to Debra E. Lyon; delyon@vcu.edu

Received 11 December 2013; Accepted 11 December 2013

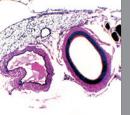
Copyright © 2013 Debra E. Lyon et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This special issue focused on the intersection of epigenetics with nursing research and practice. The first paper in this series addresses the role of epigenetic modifications in pain and analgesia response, highlighting the need for future research on epigenomic modification in the development of chronic pain, and summarizes the therapeutic potential to alter epigenetic processes to improve health outcomes. The second studies the epigenetic alterations and an increased frequency of micronuclei in women with fibromyalgia, highlighting a difference in an epigenetic biomarker in participants versus controls. The third paper explored the role of epigenetics in critical illness and the need for clinicians to understand and navigate the novel therapies of the future based on advances in epigenetic science. The fourth paper described the complexity of recruiting participants for epigenetic research and highlighted strategies, including scripts for facilitating the informed consent process. The fifth paper was an insightful review of the epigenetic mechanisms that may contribute to the biological response to trauma and risk for posttraumatic stress disorder. The sixth paper discussed the state of the science in understanding measures of cellular aging in depression.

> Debra E. Lyon Susan G. Dorsey Leorey Saligan



Gastroenterology Research and Practice



International Journal of Hypertension

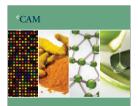


The Scientific World Journal



Nursing Research and Practice





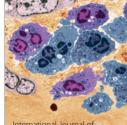
Evidence-Based Complementary and Alternative Medicine



(Irology



International Journal of Breast Cancer



International Journal of Inflammation

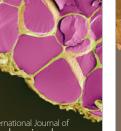




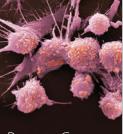




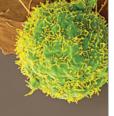
Surgery Research and Practice



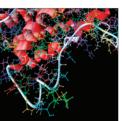
International Journal of Endocrinology automatication



Prostate Cancer



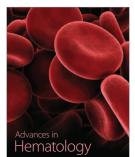
nternational Journal of Surgical Oncology



Computational and Mathematical Methods in Medicine



BioMed Research International



International Journal of Hepatology