



Debora Esposito



Assistant Professor
Regenerative Medicine

B.S. – Chemistry, Federal University
of Vicosa (UFV), MG Brazil

M.B.S. – Drug Discovery &
Development, Rutgers University,
NJ

Ph.D. – Cell and Molecular Plant
Biology, Rutgers University, NJ

Address:

Plants for Human Health Inst
Department of Animal Science
NC State University
600 Laureate Way
Kannapolis, NC 28081

Phone: +1 704 250 5465

Email: daesposi@ncsu.edu

Plantsforhumanhealth.ncsu.edu

Preclinical and Cosmetic Applications

Research emphasis:

Dr. Esposito's lab focuses on improvement of human health and longevity through scientific research on the beneficial effects of dietary and topical supplementation with phytochemicals. Her work involves an interdisciplinary, broad-based tissue regeneration and repair research program that applies basic science discoveries in the areas of phytochemistry, regenerative medicine, and skin care to improve human health and wellbeing.

Application:

- Inflammation and tissue regeneration as it applies to wound healing and skin care
- Cell-based biological screening in conventional & 3D matrices, and stem culture technologies
- Muscle aging and repair (SAMP8 model)

Collaboration potential:

- Cell culture based screening
- Animal models of muscle aging and repair

Selected publications: (limit 4)

Ricciardi CJ, Bae J, Esposito D, Komarnytsky S, Hu P, Chen J, Zhao L. 1,25-Dihydroxyvitamin D3/vitamin D receptor suppresses brown adipocyte differentiation and mitochondrial respiration. *Eur J Nutr.* 2015 54(6):1001-12.

Esposito D, Chen A, Grace MH, Komarnytsky S, Lila MA. Inhibitory effects of wild blueberry anthocyanins and other flavonoids on biomarkers of acute and chronic inflammation in vitro. *J Agric Food Chem.* 2014 23;62(29):7022-8.

Esposito D, Munafo JP Jr, Lucibello T, Baldeon M, Komarnytsky S, Gianfagna TJ. Steroidal glycosides from the bulbs of Easter lily (*Lilium longiflorum* Thunb.) promote dermal fibroblast migration in vitro. *J Ethnopharmacol.* 2013 9;148(2):433-40.

Esposito D, Komarnytsky S, Shapses S, Raskin I. Anabolic effect of plant brassinosteroid. *FASEB J.* 2011 25(10):3708-19.