

Vonny Salim

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Education

2013-Present Post-doctoral researcher

Michigan State University, East Lansing, Michigan, USA, under the supervision of Dr. Dean DellaPenna

2008-2013 Ph.D in Biotechnology

Brock University, St. Catharines, Ontario, Canada, under the supervision of Dr. Vincenzo De Luca

Thesis Title: Functional characterization of monoterpenoid indole alkaloid biosynthetic genes in *Catharanthus roseus*

2009 Visiting Student

Max Planck Institute for Chemical Ecology, Jena, Germany, under the supervision of Dr. Wilhelm Boland

2005-2007 Bachelor of Science in Biotechnology/Biochemistry

Calvin College, Grand Rapids, Michigan, USA
Johns Hopkins University, Baltimore, Maryland, USA

2003-2005 Associate of Science

Green River Community College, Auburn, Washington, USA

Awards and Honors

2006-2007 Dean's List Award for consecutive semesters, Calvin College

2006-2007 Benjamin van Andel Scholarship, Calvin College

2006 Biology Department Summer Undergraduate Research Award, Calvin College

2005 Scholastic Award, Highest Honors, Green River Community College

2005 The Outstanding Leadership and Achievement Award at Green River Community College as the president of Chemistry Club and Teachers Club

2005 Certification of Merit for the Outstanding Mathematics Tutor at Green River Community College

2004-2005 Ed Fohn Memorial Scholarship, Green River Community College

2003 Ontario Scholar Award for student who has obtained at least eighty percent in Grade Thirteen from Minister of Education, Toronto, Canada

2003 Certificate of Distinction for top twenty-five percent contestants in the Euclid Mathematics contest, University of Waterloo, Canada

Teaching

- 2012** Lecturer, Biology Department Seminar, Calvin College, USA
- 2008** *Plant Physiology* Teaching Assistant, Brock University, Canada
- 2006-2007** *Cell Biology & Genetics* and *Chemistry* Teaching Assistant, Calvin College, USA

Meeting Participation

- 2013** Gordon Conference on Plant Metabolic Engineering, New Hampshire, USA, abstract selected for oral presentation
- 2012** 3rd Banff Conference on Plant Metabolism, Alberta, Canada, abstract selected for oral presentation
- 2011** Canadian Society of Plant Biologists, Eastern Regional Meeting, Carleton University, Ottawa, Ontario, Canada, poster presentation
- 2011** Canadian Plant Genomics Workshop, Niagara Falls, Ontario, Canada, poster presentation
- 2010** Canadian Society of Plant Biologists, Eastern Regional Meeting, Brock University St. Catharines, Ontario, Canada, abstract selected for oral presentation

Publications

De Luca, V., **Salim, V.**, Thamm, A., Masada-Atsumi, S., Yu, F. (2014). Making iridoids/secoiridoids and monoterpenoid indole alkaloids: Progress on pathway elucidation. *Current Opinion in Plant Biology* 19:35-42.

Salim, V., Wiens, B., Masada-Atsumi, S., Yu, F., De Luca, V. (2014). Iridodial oxidase catalyzes a key 3 step oxidation to form 7-deoxyloganic acid in the *Catharanthus roseus* iridoid biosynthesis. *Phytochemistry* 101:23-31.

Besseau, S., Kellner, F., Lanoue, A., Thamm, A.M.K., **Salim, V.**, Schneider, B., Geu-Flores, F., Höfer, R., Guirimand, G., Guihur, A., Oudin, A., Glevarec, G., Foureau, E., Papon, N., Clastre, M., Giglioli-Guivarc'h, N., St-Pierre, B., Werck-Reichhart, D., Burlat, V., De Luca, V., O'Connor, S.E., Courdavault, V. (2013). A pair of tabersonine 16-hydroxylases initiates the synthesis of vindoline in an organ-dependent manner in *Catharanthus roseus*. *Plant Physiology* 163: 1792-1803.

Salim, V., Yu, F., Altarejos, J., De Luca, V. (2013). Virus-induced gene silencing identifies *Catharanthus roseus* 7-deoxyloganic acid-7-hydroxylase, a step in iridoid and monoterpene indole alkaloid biosynthesis. *Plant Journal* 76: 754-765.

Asada, K.*, **Salim, V.***, Masada-Atsumi, S.*, Edmunds, E., Nagatoshi, M., Terasaka, K., Mizukami, H., De Luca, V. (2013). A 7-deoxyloganic acid glucosyltransferase contributes a key step in secologanin biosynthesis in Madagascar periwinkle. *Plant Cell* 25: 4123-4134. (* co-1st authors).

Salim, V., De Luca, V. (2013). Towards complete elucidation of monoterpene indole alkaloid biosynthesis pathway: *Catharanthus roseus* as a pioneer system. *Advances in Botanical Research* 68: 1-37.

De Luca, V., **Salim, V.**, Levac, D., Atsumi, S. M., Yu, F. (2012). Discovery and functional analysis of monoterpene indole alkaloid pathways in plants. *Methods in Enzymology* 515: 207-229.

De Luca, V., **Salim, V.**, Atsumi, S.M., Yu, F. (2012). Mining the biodiversity of plants: A revolution in the making. *Science* 336: 1658-1661.

Roepke, J.*, **Salim, V.***, Wu, M., Thamm, A.M.K., Murata, J., Ploss, K., Boland, W., De Luca, V. (2010) Vinca drug components accumulate exclusively in leaf exudates of Madagascar periwinkle. *PNAS* 107: 15287-15292. (* co-1st authors).

Professional Experience

2007-2008 Development Assistant, Alder Biopharmaceuticals, Inc., Bothell, Washington, USA

2007 Quality Assurance Assistant, MDS Pharma Services, Bothell, Washington, USA

2005 Brain Tumor Research Data Assistant, New Approaches to Brain Tumor Therapy (NABTT), The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins Hospital, Baltimore, Maryland, USA