

Simone AM Badal, Ph.D., MBA, M.Phil.

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CORE EXPERTISE & SUMMARY OF ACCOMPLISHMENTS

For the last five years my lab, AntiCancer Research Jamaica (ACRJ, www.arcj.org.jm) has been focused on developing a protocol that can be used to fast track the development of novel prostate cancer cell lines from Black men in the Caribbean. In so doing, we hope to close the gap in the globally available prostate cancer cell lines, since 97% of the prostate cancer cell lines available to researchers are Caucasian in origin. We believe this disparity has contributed to the higher incidence and mortality rates of the disease among Black men regardless of the decline in mortality rates of the disease in America. **Our efforts have yielded success as we recently developed the first cell line from the Caribbean, a prostate cancer cell line, ACRJ-PC28.** The need for research like these has experienced elevated attention which has aided our success in receiving the NIH Emerging Global Leader Award in 2020 covering a five-year period. This funding, (> 500,000 USD) is geared to develop an additional 19 prostate cancer cell lines from the Caribbean. We are currently preparing our revised manuscript on ACRJ-PC28 for submission to Nature, Prostate Cancer and Prostatic Diseases.

- Experience in the areas of Biochemistry, Chemistry, Pharmacognosy, Cellular Biology, and Molecular Biology. Areas of specialization include: cell culture, cytotoxic anti-cancer research, chemoprevention, CYP450s and natural products research.
 - Editor and Author of leading, Pharmacognosy text “An Introduction to Pharmacognosy: Fundamentals, Applications and Future Strategies,” 2016, Pgs 738. ISBN-13: 978-0128021040. Copyright © 2017 Elsevier Inc.
 - Pioneering the development and genomic profiling of Caribbean cancer and normal cell lines starting with Jamaican prostate cancer cell lines.
 - Experienced in Grant sourcing, tenders, preparation and allocation and has so far raised over six hundred thousand USD towards research and over three thousand USD towards advancing educational activities in Jamaica through the ACRJ Foundation and SoSA.
 - Recognition for outstanding scholarly and service accomplishments.
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PROFESSIONAL AND VOLUNTEER EXPERIENCE

SENIOR LECTURER

2019-PRESENT

LECTURER

2015-2019

Biochemistry dept. in Basic Medical Sciences, Faculty of Medical Sciences, University of the West Indies, Mona

- Teach undergraduate Biochemistry and Pharmacology courses: Instructor- Cell Culture (ANAT2109) & Pharmacognosy (PHA 2001); Co-instructor- Biotechnology I (BIOT3113), Bioenergetics & Cell Metabolism (BIOC2014), Plant Biochemistry (BC39P) & Pharmacology and Toxicology (PHAL6018)
- Primary investigator for the development of novel Prostate cancer and normal Jamaican cell lines. Primary supervisor for PhD student on research project entitled “Primary culture and propagation on novel prostate Jamaican cell lines.” (2014).
- Primary investigator for the development of novel Breast cancer and normal Jamaican cell lines. Primary supervisor for PhD student on research project entitled “Primary culture and propagation on novel Jamaican breast cell lines.” (2016).

- Primary investigator for 3 MSc. Students on the screening of the cytotoxic effects of fungal metabolites on established ATCC cancer cell lines.
- To develop anti-cancer research in the faculty

RESEARCH FELLOW

2007 – 2015

Natural Products Institute, University of the West Indies, Mona

- Spearheaded the development of a cytotoxic screening laboratory at the Natural Products Institute while conducting, overseeing and training staff for cell culture experiments with a focus on screening Jamaican natural products for potential anticancer properties; conducted, oversaw and trained staff in CYP450 inhibition assays while managing the Biochemistry laboratory.
- A member of the advisory committee for Mr. Bentley Chambers offering guidance towards his PhD research “Clinical assessment of potential cytochrome P450 mediated drug-drug interactions in Jamaica (2012-Present).
- Trained and supervised Dr. Sheena Francis as a research assistant (2010-2012).
- Trained and supervised Miss JeAnn Murray on her MPhil project entitled: “Anticancer efficacies of isolates from endemic Jamaican plants.” (2010-2015).
- Trained and supervised Mr. Oliver Dunbar on his research projects: 1) “The effect of Cleomedetosproa on the metabolism on tuberculosis drug, Isonazid (INH)” for the BC60B course (2010) & 2) “Investigating the inhibitory properties of natural and synthetic compounds on CYP1A2 from human liver microsomes.” (2010)
- Trained and supervised Mr. David Picking on his PhD: “Screening traditional Jamaican medicinal herbs for drug/herb interactions and chemopreventive properties.” (2007-2013)

LECTURER

2010 - 2013

University of Technology,

- Spearheaded the delivery of the Pharmacognosy course to second year Pharmacy students
- Managed and prepared various organizational documents and website materials including announcements, progress reports, press releases, manuals/protocols and questionnaires.

EDITOR

2014 - PRESENT

AN INTRODUCTION TO PHARMACOGNOSY: FUNDAMENTALS, APPLICATIONS & FUTURE STRATEGIES

Published by Elsevier, December 016

- Wrote a Pharmacognosy book proposal based on the content of the Pharmacognosy course I taught at the University of Technology, Jamaica and submitted it to Elsevier. After signing a publishing deal with Elsevier, a co-editor, Rupika Delgoda was invited, subsequently, we both successfully procured over 80 global leading authors and reviewers in respective fields. The book was published in December 2016.

FOUNDER AND CHAIRMAN OF THE BOARD

2016-PRESENT

ACRJ Foundation (AntiCancer Jamaica Foundation, a non-profit and voluntary only, driven organization)

- Conceptualized and developed (register and now have charitable status) Foundation that will help high drop outs with Caribbean Secondary Examinations
- Recruited board and committee members
- Secured donating, disseminating and funnel partners
- Secured funding from Cable and Wireless Cooperative Credit Union totaling 7000USD
- Secured partnership with Jalawelo who will donate 2000USD yearly

BOARD MEMBER & CHAIR, SCIENCE POLICY COMMITTEE

2014-2017

SoSA (non-profit and a voluntary only, driven organization)

- Recruited members for the Science Policy committee and
- Conceptualized, executed and provided oversight for BRIDGE which facilitated a day of discussions on the gaps that currently exist between government and scientists and discussed possible solutions.
- Conceptualized, executed and provided oversight for the execution of STEPS4 which assembled a plethora of expert scientists to give career and motivational talks to students from grades nine through to twelve at traditional and non-traditional high schools.
- Conceptualized, executed and provided oversight for CATALIS through the dissemination of questionnaires in order to ascertain the efficiency or lack thereof of ordering scientific goods and equipment on UWI campus.
- Secured funding from the TWAS organization, the National Health Fund and many private donors R & D totaling approximately \$6,000 USD for the annual 2016 SoSA conference and STEPS 1 initiative.
- Secured funding from the National Commercial Bank and Biotech R & D totaling \$250,000 JMD for the development of a science lab in a low resourced school and conference proceedings respectively in 2014.
- Train and mentor organizational intern and volunteers in preparation of requisite documents.

RESEARCH MANAGEMENT CONSULTANT/SCIENTIFIC AUTHOR

2012-2013

Biotech R & D, Eden Gardens,

- Analyzed research data, assembled manuscripts and selected appropriate journals for publication. Within 1 year, over 6 peer-reviewed papers were successfully accepted for publication

RESEARCH ASSISTANT

2005 - 2006

TMRI, University of the West Indies

- Researched and designed the protocol for the IAEA project and trained several research assistants and a nurse for task execution on the project

LABORATORY TEACHING ASSISTANT

2003-2005, 2008-2012

Department of Basic Medical Sciences - Biochemistry Section, University of the West Indies, Mona

Courses: Biochemistry; Microbiology; Molecular Biology I; Introductory Microbiology; Cells, Molecules and Genetics

- Supervised undergraduate students in lab sessions including demonstration of required laboratory techniques; graded lab reports.

EDUCATION

PhD, Biochemistry, University of the West Indies

2012

Dissertation: Chemopreventive and anticancer potential of Jamaican natural products.

Supervisor: Dr. Rupika Delgoda

MBA, International Relations, University of the Wales, Cardiff

2007

Thesis: The effect of HRM on Royal Mail Postal Service

Advisor: Dr. Tom Reeves

M. Phil, Biochemistry & Molecular Biology, University of the West Indies, Jamaica

2005

Thesis: The effect of Nitric oxide on the insulin mediated signal transduction pathway in rat adipocytes, hepatocytes and myocytes.

Advisor: Dr. Dailp Ragoobirsingh

B.Sc. Biochemistry & Chemistry (Hons.), University of the West Indies, Jamaica

2003

AS AN EXAMINER

I have examined the written and oral presentations of research work by postgraduate students at the master's and Ph.D. levels and undergraduate students. During this time, I alongside my fellow examiners ensure that the work presented follows the requirements of The University's guidelines and that these standards are upheld.

- Alana Clare passed the written component of her MSc. **2023**
 - Kimberly Badal successfully completed her Ph.D. with high Commendations **2022**
 - Chevaughn Witter was allowed to upgrade to Ph.D. after two attempts **2021**
 - Sasha-Gaye Malcom failed her oral and written Ph.D. to submit after 18 months **2022**
 - Gregory Williams was allowed to upgrade to Ph.D. **2018**
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AWARDS

- **Flair Distinguished Award for Science and Technology, 2022.**
 - Thirty-five women in Jamaica were selected for their impactful work in the fields of, Agriculture, Arts and Culture, Business, Education, Entertainment, Fashion, Food, Health, Media and Communications, Nation Building, Science and Technology, Sports, and Volunteerism. The Award was presented at the fourth Flair Distinguished Award at the Pegasus Hotel, Jamaica, April 4th **2022**
- **Scientific Research Council's 'S&T XXtrordineer JA.'** Publication, 2022
 - I was selected as one of of Jamaica's female pioneering scientist to participate in the **S&T Xxtrordineers JA (Women in Science)** Series, a recognition programme that highlights extraordinary female pioneers in science and technology. The documentary series and publication highlights the scientific works of phenomenal Jamaican women who have impacted the national development of our country. **2022**
- **Runner-up for the Nature Research Award, Inspiring Women in Science, 2021**
 - I was selected among more than seventy-five female applicants globally where I competed with distinguished female scientists from advanced settings like Harvard for their impactful global work. I was one of two runners-up. **2021**
- **Shortlisted among eight candidates for the 2020 Nature Driving Global Impact Award** in partnership with
 - Tencent, celebrates early-career researchers, whose work has made, or has the potential to make, a positive impact on the global challenges. **2020**
- The **Dr. Niven and Paula Narain Fellowship, 2019** that funded the attendance of myself and three
 - postgraduates at the AC3 conference held at the Jamaican Pegasus, Jamaican, West Indies. **2019**
- **Outstanding woman for 2012 for the celebrating UWI Women-** A UWI 70th anniversary project, **2019**
 - The Institute for Gender and Development Studies, Regional Coordinating Office in association with the Office of the Vice Chancellor, The University of the West Indies undertook a regional project entitled Celebrating UWI Women for the 70th anniversary of the founding of The UWI. The project was geared to highlight the significant contribution of 70 women (1 per year) who graduated from the four campuses of The UWI since its inception. I was selected for the year 2012.
- **Principal's Award for Best Research Paper** **2017**
 - "Glucarubulone glucoside from *Castela macrophylla* suppresses MCF-7 breast cancer cell growth and attenuates benzo[a]pyrene-mediated CYP1A gene induction." (Badal SAM, Asuncion Valenzuela MM, Zylstra D, Huang G, Vendantam P, Francis S, Quitugua A, Amis LH, Davis W, Tzeng TJ, Jacobs H, Gangemi DJ, Raner G, Rowland L, Wooten J, Campbell, Brantley E and Delgoda R)
- **BioNext Fellow, France** **2015**

- *One of ten international prizes awarded in 2012 where each fellow was given the opportunity to present their work on a fully paid trip at the Biovision World Life Sciences Forum held in Lyon France. April 14th to 17th 2015. Oral presentation on Anticancer Research Jamaica was made.*
- **Elsevier Early Career Woman Scientist in Chemical Sciences, Chicago** **2014**
 - *One of five international prizes and this one was for the Caribbean and Latin America region presented at the 2014 AAAS meeting in Chicago, February 13th to 17th.*
- **Principal's Award for Best Research Paper** **2014**
 - *"Antiproliferative activity and absolute configuration of zonaquinone acetate from the Jamaican alga Stypopodium zonlae." (Penicooke N, Walford K, Badal S, Delgoda R, Williams LA, Joseph-Nathan P, Gordillo-Romn B, Gallimore W).*
- **Young Scientist/Technologist Awardee** **2012**
 - *Single national award given biennially to the top young scientist with the best presentation and overall achievements, presented at the 2010 23rd Science & Technology Conference & Expo.*
- **Inaugural Luther Speare Scholar, Graduate Studies and Research, University of the West Indies** **2012**
 - *Single award given among graduate students participating in cancer research that offers 500,000JMD/annum during the course of graduate studies and presented in the Principal's conference room.*
- **First place for excellence poster Prize** **2012**
 - *"Anticancer and chemopreventive leads from Garcinia humilis and Clusia flava", Badal S, Huang G, Tzeng T, Jacobs H, and Delgoda R, Presented at the 7th meeting of the International society for the development of natural products, November, 2012, Delhi, India.*
- **Second place poster Prize** **2010**
 - *"Anticancer and chemopreventive leads from the marine algae, Cymopolia barbata, Badal S, Gallimore W, Huang DG, Tzeng TJ, Gangemi DJ, and Delgoda R, Presented at the first Society for Scientific Advancement conference held in Jamaica, 2012.*
- **First place for excellence poster Prize** **2010**
 - *"Natural Products as inhibitors of CYP1 enzymes", Badal, S, Williams SA, Helen Jacobs H, and Delgoda R, Presented at the Mona Symposium 2010, Natural Products and medicinal chemistry, UWI, Mona.*
- **Research & Publications grant award, Dept. of Graduate Studies, University of the West Indies** **2010**
 - *Competitive university-wide award that facilitated overseas training at the Clemson University.*
- **Departmental Award, University of the West Indies** **2008 – 2010,**
 - **2002,2004,** *Awarded on to students with First and Upper second class honours in pursuit of graduate studies.*

SERVICE & LEADERSHIP

- Invited to be a part of the Wellcome's IRDB Expert Advisory Board to help improve equity, diversity, and inclusion at Wellcome and their funding programmes **2022-Present**
- Editorial Board Member, Journal of Cancer Science & Clinical Research **2014 - Present**
- Editorial Board Member, American International Journal of Biology **2013 – Present**
- Advisory Board Member, Open Access Biochemistry, London **2013 - Present**
- Reviewer, Cellular Physiology and Biochemistry **2014**
Paper on "palmitic acid in associated with superoxide and iNOS activation in rat skeletal muscle cells"
- Organizing team, TedX, Jamaica **2012-2013**

PROFESSIONAL AFFILIATIONS

- Founder and chair, ACRJ Foundation (ACRJF)
- Member, African Caribbean Cancer Consortium (AC3)
- Member, Cancer Epigenetics Society (CES)
- Member, Organization for Women in Science (OWSD)
- Member, Third World Academy of Science (TWAS)
- Member, Cancer Epigenetics Society (CES)
- Chair, Society for Scientific Advancement (SoSA) 2014-2016

PATENTS

- Delgoda R, **Badal S** and Brantley E. 2014. **2014**
 “Quassinoids and coumarin compounds for cancer prevention.” PCT/US2014/040375. Patent pending. Wilmer Hale Lawyers.
- **Badal S** and Delgoda R et al. **2014**
 “Anticancer and chemopreventive properties of synthetic amides.” Provisional application filed April 2014. Wilmer Hale Lawyers Trainee Member, Society for the Study of Reproduction

SELECTED PUBLICATIONS

1. Valentine H, Aiken W, Morrison B, Zhao Z, Fowle H, Wasserman JS, Thompson E, Chin W, Young M, Clarke S, Gibbs D, Harrison S, McLaughlin W, Kwok T, Jin F, Campbell KS, Horvath A, Thompson R, Lee NH, Zhou Y, Grana X, Ragin C, **Badal S**. 2022, Expanding the prostate cancer cell line repertoire with ACRJ-PC28, an AR-negative Neuroendocrine Cell Line Derived From and African-Caribbean Patient. *Cancer Research Communications*, 2022, 2-1355-1372.
2. Clarke S, Chin S, Dodds Leah, George SHL, **Badal S**. 2021, Racial Disparities in Breast Cancer Treatment: From Preclinical to clinical. *Breast Cancer Research*, 2022, 24 PubMed PMID: [35932017](#).
3. **Badal S**, Ethnically diverse cancer cell lines for drug testing. *Nat Rev Can*, 2022, 22:65-66.
4. **Badal S**, The importance of ancestry and diversity in cell line collection and analysis for people of African ancestry. *Cancer Control*, 2021, 40.
5. Zhao Z, Fowle H, Valentine H, Liu Z, Tan Y, Pei J, **Badal S**, Testa J, Grana. Immortalization of human primary prostate epithelial cells via CRISPR inactivation of the CDKN2A locus and expression of telomerase. *Nature Prostate Cancer and Prostatic Diseases*, 2021, 24:233-243.
6. **Badal S**, Aiken W, Morrison B, Valentine H, Bryan S, Gachi A and Ragin C. Disparities in prostate cancer incidence and mortality rates: solvable or not? *The Prostate*. 2020 80:3-16.
7. **Badal S**, Campbell KS, Valentine H, Ragin C. The need for cell lines from diverse ethnic backgrounds for prostate cancer research. *Nat Rev Urol*. 2019 16:691–692.
8. **Badal S, Turfus S**, Rajnarayanan R, Wilson-Clarke C and Sandiford S. Analysis of natural product regulation of opioid receptors in the treatment of human disease. *Pharmacol Ther*. 2018 Apr; 184:51-80. doi: 10.1016/j.pharmthera.2017.10.021. Epub 2017 Oct 31

9. **Badal S**, Smith K and Rajnarayanan R. Analysis of natural product regulation of cannabinoid receptors in the treatment of human disease. Pharmacol Ther. Dec; 180:24-48. doi: 10.1016/j.pharmthera.2017.06.003.
10. **Badal S**, Asuncion Valenzuela MM, Zylstrac D, Huang G, Vendantam P, Francis S, Quitugua A, Amis LH, Davis W, Tzeng TJ, Jacobs H, Gangem DJ, Raner G, Rowland L, Wooten J, Campbell P, Brantley E, and R Delgoda R, Glucarubulone glucoside from *Castela macrophylla* suppresses MCF-7 breast cancer cell growth and attenuates benzo[a]pyrene-mediated CYP1A gene induction. Accepted for publication in Journal of Applied Toxicology, 2016, doi: 10.1002/jat.3436.
11. Elufioye TO, **and Badal S**, “Background to Pharmacognosy” in “An Introduction to Pharmacognosy: Fundamentals, Applications and Future Strategies,” Badal S (Ed.) and Delgoda R, 2016, p4-12. ISBN 13: 978-0128021040
12. **Badal S**, Byfield G, Brown MC, Lawrence Y, Hartley S, Daley DK and Smith KN. “Areas of science embraced by pharmacognosy” in “An Introduction to Pharmacognosy: Fundamentals, Applications and Future Strategies,” Badal S (Ed.) and Delgoda R (Ed.), 2016, p31-42. ISBN 13: 978-0128021040.
13. **Badal S**, “Plant metabolites and more treating various ailments: Natural products treating diseases” in “An Introduction to Pharmacognosy: Fundamentals, Applications and Future Strategies,” Badal S (Ed.) and Delgoda R (Ed.), 2016, p337-357. ISBN 13: 978-0128021040
14. Daley DK, Brown KJ and **Badal S**, “Fungal metabolites” in “An Introduction to Pharmacognosy: Fundamentals, Applications and Future Strategies,” Badal S (Ed.) and Delgoda R (Ed.), 2016, p413-420. ISBN 13: 978-0128021040
15. **Badal S**, Aiken W, and Ward S. Molecular targets and angiogenesis in Renal cell carcinoma: A multi-target approach. Current Drug Targets. May 2nd 2016, Ahead of print.
16. **Badal S**, Collins-Fairclough A, Stewart C, Smith K. Potential for naturally-derived therapeutics: The Caribbean as a Model. Insights from the Conference on Therapeutics & Functional Genomics. Expert Opinion on Biological Therapy. 2014. 30:1-4.
17. Chambers B, Luke A, Forrester T, Rattray V, and **Badal S**. The Need for Improved BPA Testing and Awareness among Stakeholders in Underdeveloped Countries: A Jamaican Pilot Study. Int. J Curr. Microbiol. App. Sci. 2015. 4(6): 452-466.
18. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Unearthing the medicinal properties of *Tillandsia recurvata* (ball moss): A mini review. European journal of medicinal plants. 2014. 4: 1138-49.
19. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Promising efficacy of the *Cola acuminata* plant: A mini review. Advances in Biological chemistry. 2014. 2: 240-45.
20. **Badal S** and Delgoda R. Role of the modulation of CYP1A1 expression and activity in chemoprevention, a mini review. Journal of Applied Toxicology. 2014. 34: 743-53.
21. **Badal S** and Delgoda R. CYP1B1: friend or foe? A critical review. OA Biochemistry. 2013. 1:8.
22. Penicooke N, Walford K, **Badal S**, Delgoda R, Williams LAD, Joseph-Nathan P, Gordillo-Ramon B, Gallimore W. Antiproliferative activity and absolute configuration of zonaquinone acetate from the Jamaican alga *Stypodium zonale*. Phytochemistry. 2013. 87: 96-101.

23. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Cytotoxic effect of Jamaica bissu nut extracts on various cancer cell lines. Applied cell biology. 2012. 1: (1) 47-49.
24. **Badal S**, Shields M, Delgoda R. Cytochrome P450 enzyme inhibitors from nature, In edited book "Enzyme Inhibition and Bioapplications", Sharma RR (Ed.), 2012, p39-56.; ISBN: 978-953-51-0585-5, InTech, Available from:
25. <http://www.intechopen.com/books/enzyme-inhibition-and-bioapplications/cytochrome-p450-enzyme-inhibitors-from-nature>.
26. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. In vitro anticancer activity of the crude extract and two dicinnamate isolates from the Jamaican Ball Moss (*Tillandsia recurvata* L.). American International Journal of Contemporary Research. 2012. 3: (1) 92-96.
27. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Cycloartane-3,24,25-triol inhibits MRCK α kinase and demonstrates promising anti prostate cancer activity in vitro. Cancer Cell International. 2012. 12: (46) 1-4.
28. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Kinase inhibition of the Jamaican ball moss, *Tillandsia recurvata*, L. Anticancer Research. 2012. 32: 4419-4422.
29. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Cycloartanes from the Jamaican ball moss, *Tillandsia recurvata* L. Analytical Chemistry, an Indian Journal. 2012. 12:190-193.
30. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Anti-angiogenic properties of the Jamaican ball moss (*Tillandsia recurvata* L.) ISCA Journal of Biological Sciences. 2012. 1:73-76.
31. Lowe HIC, Watson CT, **Badal S**, Toyang NJ, and Bryant J. Isolation, purification and partial characterization of a glycoside from the Jamaican ball moss (*Tillandsia recurvata* L.). Advances in biological chemistry. 2012. 2:274-282.
32. **Badal S**, Gallimore W, Huang DG, Tzeng TJ, Gangemi DJ, and Delgoda R. Cytotoxic and potent CYP1 inhibitors from the marine algae, *Cymopolia barbata* Organic and Medicinal Chemistry Letters. 2012. 2:21-25.
33. **Badal S**, Williams S, Huang G, Francis S, Vendantam P, Dunbar O, Jacobs H, Tzeng TJ, Gangemi J, and Delgoda R. Cytochrome P450 1 enzyme inhibition and anticancer potential of chromene amides from *Amyris Plumieri*. Fitoterapia. 2011. 82: 230-236.
34. Shields M, Niazi U, Badal S, Yee T, Sutcliffe MJ and Delgoda R. Inhibition of CYP1A1 by Quassinoids found in *Picrasma excelsa*. Planta. Med. 2009. 74: 1-5.
35. **Badal S**, Williams SA, Jacobs H, and Delgoda R. Natural Products as Inhibitors of CYP Enzymes. Drug Metabolism reviews. October 18-22, 2009. ABSTRACT.
36. **Badal S**, Shields M, Niazi U, Jacobs H, Sutcliffe MJ and Delgoda R. Screening Natural Products for CYP1 Inhibitors, Proceedings of the 17th International Symposium on Microsomes and Drug Oxidations. Saratoga Springs, New York, U.S.A, July. 2008. 20-24.
37. Brown PD, Badal S, Morrison S, and Ragoobirsingh D. Acute impairment or insulin signalling by dexamethasone in primary cultured rat skeletal myocytes. Molecular and Cellular Biochemistry. 2006. 297: 171-177.

38. **Badal S**, Brown PD, and Ragoobirsingh D. Nitric Oxide impaired insulin-mediated signal transduction in rat skeletal muscle. BMC Biochem. 2006. 7: 7-17.
39. **Badal S**, Brown PD, and Ragoobirsingh D. Exogenous nitric oxide inhibits IRS-1 expression in rat hepatocytes and myocytes. Journal of Biomedical Science. 2006. 13: 561-568.

RESEARCH PRESENTED

Simone Badal

Biennial CapTC Conference, 2020, Tools for characterization and Further Investigation, Virtual. December 8-9.

Simone Badal

African Caribbean Cancer Consortium Scientific and training Conference, Sheraton Miami Airport and Executive Meeting Centre, Miami, Florida, October 6-9th (2017).

Anticancer research now in Jamaica: A step towards a personal approach (Talk)

Simone Badal

Faculty of Science and Sports, University of Technology: Solving problems, keeping the vibes forum Jamaica, MARCH (2016)

A public lecture on: Cancer research in Jamaica: Where we are and where we need to be (Talk)

Simone Badal

METHODS 2015: The international symposium on methods for studying drug metabolism and transport, and African traditional Medicine, Pretoria, South Africa, NOVEMBER (2015)

Potential chemopreventive properties of Jamaican natural properties (Talk and poster)

Simone Badal

Northern Caribbean University, Office of Graduate Studies and Research in collaboration with The Carnegie Foundation for Cancer Research, Mandeville, Jamaica (2015)

A Public Lecture on Human cancer cells, important for target specific anticancer solutions and a panelist

Simone Badal

Biovision World Life Sciences Forum, Lyon France (2015)

Anticancer Research Jamaica (Talk)

Simone Badal

6th Biennial Jamaica Diaspora conference, Conference Centre, Montego Bay (2015)

Society for Scientific Advancement (Two Talks)

Simone Badal

Annual AAAS, Caribbean Division Conference, Caguas, Puerto Rico (2014)

Anti-cancer and chemopreventive properties of Jamaican natural and synthetic compounds. (Key Note Talk)

Simone Badal and Rupika Delgoda

University of Technology Health Professionals conference at the New Kingston Conference Centre, Jamaica (2014)

In vitro testing: using cancer cell lines to aid drug development (Talk)

Simone Badal, George Huang, Pallavi Vedantam, Sheena Francis, Willie Davis, Eileen Brantley, Tzuen-Rong Jeremy Tzeng, Helen Jacobs and Rupika Delgoda
3rd CBB conference held in Toronto, Canada. September 16th -17th 2013 **(2013)**
Potential anti-cancer and chemopreventive properties of Jamaican natural products (Talk)

Simone Badal and Rupika Delgoda
Cariscience conference, Grand Bahia Principe, Runaway Bay, Jamaica **(2013)**
Screening Jamaican natural products for potential anti-cancer and chemopreventive properties (Talk)

Simone Badal, Winklet Gallimore, George Huang, Tzuen-Rong. Tzeng, Dave Gangemi, and Rupika Delgoda
Society for Scientific Advancement conference, Kingston, Jamaica **(2012)**
Anticancer and chemopreventive leads from the marine algae, *Cymopolia barbata* (Talk)

Simone Badal, George Huang, Tzuen-Rong. Tzeng, Helen Jacobs, and Rupika Delgoda,
7th meeting of the International society for the development of natural products, November, 2012, Delhi, India.
Anticancer and chemopreventive leads from *Garcinia humilis* and *Clusia flava* (Poster)

Simone Badal, George Huang, Tzuen-Rong Jeremy Tzeng, Helen Jacobs and Rupika Delgoda.
7th meeting of the International society for the development of natural products, Jamaica **(2012)**
Anticancer and chemopreventive leads from *Garcinia humilis* and *Clusia flava* (Talk)

Simone Badal, George Huang, Helen Jacobs, Winklet Gallimore, Tzuen-Rong Jeremy Tzeng, and Rupika Delgoda.
9th FPAS conference, Jamaica **(2012)**
Uncovering the anticancer efficacies of Jamaican natural products (Talk)

Simone Badal, Winklet Gallimore, George Huang, Tzuen-Rong Tzeng, Dave Gangemi, and Rupika Delgoda.
CHRC 56th Annual scientific meeting, Guyana. **(2011)**
West Indian Medical Journal. Supplement 2, vol 60 pg 40
Anticancer and chemopreventive leads from the marine algae, *Cymopolia barbata* (Poster)

Simone Badal, Sheena Francis, Danniebelle Haase, George Huang, Tzuen-Rong Tzeng, Helen Jacobs and Rupika Delgoda
CHRC 56th Annual scientific meeting, Guyana **(2011)**
West Indian Medical Journal. Supplement 2, vol 60 pg 40
Potential chemopreventive xanthenes found in *Garcinia humilis* (Poster)

Simone Badal, Winklet Gallimore, George Huang, Tzuen-Rong Tzeng, Dave Gangemi, and Rupika Delgoda
FMS Annual research conference, Jamaica. **(2010)**
West Indian Medical Journal (supplement 4) 59: p52
Anticancer and chemopreventive leads from the marine algae, *Cymopolia barbata* (Poster)

Simone Badal, David Picking, Pallavi Vendantam, Sheena Francis, Helen Jacobs, George Huang, Tzuen-Rong Jeremy Tzeng, Paul Reese, Winklet Gallimore, Yvette Jackson, and Rupika Delgoda
Health Professionals Conference, University of Technology, Jamaica **(2010)**
Journal of Arts Science and Technology, 4 (supplement 1) p15-16. 2010
Anticancer efficacy of Jamaican natural Products. (Talk)

Simone Badal, David Picking, Sheena Francis, Helen Jacobs, George Huang, Tzuen-Rong Jeremy Tzeng, Paul Reese, Winklet Gallimore, Yvette Jackson, and Rupika Delgoda
7th International symposium on chromatography on natural products, Lublin Poland **(2010)**
Unearthing the biological value of Caribbean natural products: Cancer preventive and treatment potentials. (Poster)

Simone Badal, Williams Sheri-Ann, Helen Jacobs and Rupika Delgoda
23rd Mona Symposium on natural products and medicinal chemistry, Jamaica **(2010)**
Natural products as inhibitors of CYP enzymes. (Poster)

SA Parker, Helen Jacobs Rupika Delgoda and **Simone Badal**
23rd Mona Symposium on natural products and medicinal chemistry **(2010)**
Semi-synthetic polyprenylatedacylphloroglucinols (PPAPS) from 7-epi-nemorosone, the major constituent of *Clusia flava* (Poster)

Simone Badal, Mario Shields, Umar Niazi, Paul Reese, Helen Jacobs, Michael Sutcliffe and Rupika Delgoda
17th International Symposium on Microsomes and Drug Oxidations. Saratoga Springs New York **(2009)**
Natural Products for CYP1 Inhibitors. (Poster)

Simone Badal, George Huang, Helen Jacobs, Tzuen-Rong Jeremy Tzeng, and Rupika Delgoda
23rd Science & Technology conference & Expo, Jamaica. p26 **(2009)**
Uncovering the anticancer efficacies of Jamaican natural products (Poster)

Simone Badal, Sherri-Ann Williams, Helen Jacobs, and Rupika Delgoda
17th International Symposium on Microsomes and Drug Oxidations. Saratoga Springs, New York, USA **(2008)**
Natural Products as Inhibitors of CYP Enzymes. (Poster)

Simone Badal, Mario Shields, Paul Reece, Helen Jacobs, Yvette Jackson, Winklet Gallimore, Michael Sutcliffe and Rupika Delgoda,
8th conference of the faculty of Pure and Applied Sciences, Jamaica **(2008)**
Screening for potential chemoprotective properties of natural and synthetic compounds. (Poster)

Simone Badal, Paul Brown and Dalip Ragoobirsingh
50th CHRC Annual scientific meeting, Trinidad and Tobago **(2005)**
West Indian Med. J. 54 (Suppl. 2): 32.
In vitro studies on the effect of nitric oxide on IRS-1 phosphorylation in insulin mediated signal transduction (Talk)

Simone Badal, Paul Brown and Dalip Ragoobirsingh
CHRC Annual scientific meeting, Trinidad **(2004)**
West Indian Med. J. 53: 25.
In vitro studies on the effect of nitric oxide on IRS-1 phosphorylation in signal transduction (Poster)

TECHNICAL EXPERTISE

- Culture of human cancer and normal cells and murine cells including breast, colon and liver.
- Culture of primary animal cells including; adipocytes, hepatocytes and myocytes
- MTS assay
- CYP450 enzyme inhibition assays
- Data manipulation using Sigma Plot and Enzyme Kinetics

RESEARCH FUNDING AND GRANTS RAISED

- Berg LLC. (PI: Badal), Novel Prostate Cancer Cell Lines to Address Prostate Cancer Disparity in Black Men. The grant provides, equipment and lab consumables for the project. 6/12/2019-6/12/2021
- IRONMAN (Site PI: Badal), The Movember Foundation: Registry for Black men with advanced prostate cancer. Funding is provided to offset initial startup costs to cover salary and lab reagents. For each patient recruited, the project generates income to cover salary, lab consumables and shipping costs for biospecimens. 21/07/2021-21/07/2026
- Chan Zuckerberg Donor Advised Fund (DAF), (Site PI: Badal) through the Silicon Valley Community Foundation (SVCF) 01/01/2022-01/01/2024
- The African Caribbean scNetwork. Funding will cover single cell sequencing (breast, prostate, and fallopian cancer and normal cells), salary and sample storage, processing, and shipment.
- African Cancer Genome Registry (Site PI), Registry for Black men with prostate cancer. Funding by Pfizer will cover salary, lab consumables and sample storage, processing, and shipment. 21/07/2021-21/07/2026
- NIH, Fogarty International Centre Emerging Global Leader Award, “Novel Prostate Cancer Cell Lines to Address Prostate Cancer Disparity in Black Men.” USD 520,000. Principal Investigator. 2020-2025.
- I facilitated a collaborative agreement between The UWI, Mona and the pharmaceutical company Berg LLC. Through this agreement Berg has pledged support in the amount of 50,000 USD to support the research on developing novel Jamaican cell lines. We have already received the first shipment of reagents approximating 10,000 USD. Principal Investigator. 2020.
- \$67,000 USD from the National Health Fund towards the development of Jamaican prostate cancer and normal cell lines (2014)
- \$15000 USD from the Principal’s New Initiative Fund, Development of Jamaican prostate cancer and normal cells lines and biomarker evaluations (2015)
- \$20,000 USD raised for the ACRJ Foundation from 2018 to current to help persons who have dropped out of high school to get a second chance.
- \$2,000 USD raised with the SOSA group from TWAS group to increase science awareness among our Jamaican community (2015)
- \$2,500 USD raised with the SoSA group to increase science awareness among our Jamaican community (2004-2006)
- \$6,000 USD raised from Graduate Studies & Research to conduct PhD studies (2008-2012)

REFERENCES

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