Contact Details

Name Bashair M. Mussa

Nationality Australian

Address M27 Basic Medical Science Department

College of Medicine University of Sharjah United Arab Emirates

E-mail <u>bashairmm1@gmail.com</u>

Position (Jan 2022-Present) Associate Professor of Physiology (Sept 2015-Jan 2022) Assistant Professor of Physiology

Basic Medical Sciences Department

College of Medicine University of Sharjah

ORCID # 0000-0002-1554-6319

Research Gate https://www.researchgate.net/profile/Bashair_Mussa

Scopus https://www.scopus.com/authid/detail.uri?authorId=23480480400

Education & Research Interests

Advanced Certificate in Health Professions Education - 2020 Basic Certificate in Health Professions Education - 2020

College of Medicine

University of Sharjah (UAE)

PhD – Neurophysiology - 2011

Department of Medicine

The University of Melbourne (Australia)

Dean's Honour List for Academic Excellence - 2005

Department of Medicine

The University of Melbourne (Australia)

BSc (Hons) – Neurophysiology - 2005

Department of Medicine

The University of Melbourne (Australia)

PhD Dissertation Title – Dorsal motor nucleus of the vagus: physiological roles in controlling pancreatic secretory function

Research Interests

Diabetic Neuropathy, Neuroendocrine, Neurophysiology of the pancreas, Central control of insulin secretion, Glucose homeostasis, Physiological stress,

Memberships

American Physiological Society
American Diabetes Association
Australian Neuroscience Society
Emirates Diabetes Society
Ambassador of Asian Council of Science Editors

Referee of international journals

Frontiers In Neuroanatomy
Diabetes Research and Clinical Practice
Ibnosina Journal of Medicine and Biomedical Sciences
Journal of Pain Research
International Journal of Nephrology and Renovascular Disease
Clinical and Experimental Gastroenterology
Dubai Diabetes and Endocrinology Journal
Clinical Case Reports

Professional Activities

Head of Global Engagement Department 2022 - Present

Office of International Relations - University of Sharjah - UAE

Acting Head of the Global Mobility Department 2022 - Present

Office of International Relations – University of Sharjah - UAE

Coordinator of MSc in Diabetes Management 2018 – Present

College of Medicine – University of Sharjah (UAE)

Coordinator of Neuroscience Unit – 2015 - 2019

College of Medicine – University of Sharjah (UAE)

Founder of CREATE Faculty Development Program

College of Medicine – University of Sharjah (UAE)

Founder of Students Research Week

College of Medicine – University of Sharjah (UAE)

Coordinator of Diabetes Training Course for PHC Doctors 2013-2015

Rashid Centre for Diabetes Research – (UAE)

Lead Clinical Research Associate - 2013-2015

Rashid Centre for Diabetes Research – (UAE)

Committee membership

International Committee – American Physiology Society
Hybrid Education Committee – College of Medicine – University of Sharjah
Examination Review Subcommittee – College of Medicine – University of Sharjah
Women in Research Committee – University of Sharjah
Chair – Organizing Committee of Women in Research Forum – University of Sharjah
Research Committee – College of Medicine – University of Sharjah
Translational Research - College of Medicine – University of Sharjah
University Committee for International Relations and Ranking – University of Sharjah
Scientific Committee of Regional Conferences on Diabetes and Obesity – RCDR
Research, Education, Quality and Awareness Committee - RCDR

Teaching Experience

Teaching & Coordinating Courses/Units

Undergraduate Courses

- ➤ Principles of Neurophysiology (Foundation Year Medical Students)
- ➤ Neurophysiology Course (Year1 Dental Medicine Student)
- ➤ Physiology of Appetite and Feeding Behaviour (Year 2 Medical Students)
- > Physiology of Pancreatic Hormones (Year 2 and Year 3 Medical Students)
- ➤ Neurophysiology Unit (Year 3 Medical Students)
- Neurophysiology of Special Senses (Year 3 Medical Students)
- ➤ Multisystem Physiology Unit (Year 3 Medical Students)
- ➤ Physiology of Brain and Spinal (Emergency Medical Technicians Course)

Postgraduate Courses (Student number/class 10-20 students)

- ➤ MSc in Molecular Medicine (Teaching)
- ➤ MSc in Diabetes Management (Teaching & Program Coordinator)
- MSc in Biomedical Engineering (Teaching Neuroscience Course)
- ➤ Diabetes Training Course for Primary Health Professionals (Teaching and Program Coordinator)

Examinations

Undergraduate Students

- > Year 1 (College of Medicine)
- > Year 1 (Dental Medicine)
- Year 2 (College of Medicine
- Year 3 (College of Medicine)

Postgraduate Students

- ➤ MSc Theses & Dissertations
- ➤ Diabetes Training Course for Primary Health Professionals

Student Supervision

- \triangleright PhD 1 student
- \rightarrow MSc 4 Students
- ➤ Undergraduate students 10 groups (2-5 students in each group)

Grants and Awards

- 1. **Co-investigator.** Sanofi Grant. Identification of biomarkers for early detection of hypoglycemia-associated autonomic failure: a prospective clinical study. Sep 2019 (250,000 AED/94,000 AUD).
- 2. **Principal investigator**. Al Jalila Foundation Grant. Investigating the role of FOS and BECLIN1-inducing autophagy in pathogenesis of hypoglycaemia-associated autonomic failure in diabetes". Oct 2018 (291,000 AED/110,000 AUD).
- 3. **Principal investigator**. University of Sharjah (Targeted Grant). Investigation of the relationship between pancreatic exocrine dysfunction and abdominal obesity in Emirati patients with type 2 diabetes mellitus., July 2018 (200,000 AED/73,000 AUD).
- 4. **Principal investigator.** University of Sharjah (Collaborative Grant). New sights into obesity-associated diabetic neuropathy: an interrelationship between nitric oxide synthase and insulin resistance. September 2017 (200,000 AED/73,000 AUD).
- 5. **Principal investigator.** Sheikh Hamdan Bin Rashid Al Maktoum Award for Medical Sciences. Genetic and transcriptomic analysis of hyperlipidemia in Emirati patients with type 1 diabetes mellitus using saliva and blood samples. July 2017 (200,000 AED/73,00 AUD).
- 6. **Principal Investigator**. Boehringer Ingelheim Grant. Diabetic gastoparesis and associated hypoglycemia: a focus on the involvement of nitrergic neurotransmission. Nov 2017 (16,000 AED/6000 AUD).
- 7. **Principal Investigator**. Labco-Grant. Investigation of molecular basis of Fos expression in hypothalamic cells. (Principal Investigator) Jan 2016 (15,000 AED/5,000 AUD).

- 8. **Principal Investigator** University of Sharjah (Seed Grant). Beta-cell function and failure: a focus on the interaction between peripheral cholinergic pathway and nitric oxide to regulate insulin secretion (Principal Investigator) April 2016 (40,000 AED/15,000 AUD).
- 9. **Principal Investigator**. Boehringer Ingelheim Grant. Diabetes-induced depression: BDNF as a promising therapeutic target. Jan 2016 (16,000 AED/6,000 AUD).
- 10. **Co-investigator**. Al Jalila Foundation Grant. All New Diabetic in Sharjah and Ajman (ANDISA): An epidemiological and Genetic Study Toward Individualized Medicine, September 2017 (300,000 AED/110,000 AUD).
- 11. **First Place Prize** (Oral Presentation), 9th Emirates Diabetes & Endocrine Congress (Dubai-UAE) Feb 2019.
- 12. **Poster Presentation** Award, 6th Emirates Diabetes & Endocrine Congress (Dubai-UAE), Feb 2016.
- 13. **Al Jalila Foundation**. Research Matter Newsletter. November 2020 https://mailchi.mp/aljalilafoundation/research-matters-1177483?e=02ef25fb61
- 14. **6th UAE Undergraduate Research Competition** for students under my supervision, May 2018.
- 15. **Second Place Poster Award** for a presentation by students under my supervision, 7th Emirates Diabetes & Endocrine Congress (Dubai-UAE), Feb 2017.
- 16. **Presentation Award** for students under my supervision, Diabetes World Day Nov, 2016.
- 17. **Certificate of Appreciation**, for contributions to the Continuous Medical Education Program: 4th Regional Conference on Diabetes and Obesity Rashid Centre for Diabetes and Research (Ajman, UAE), Nov-2014.
- 18. **Certificate of Appreciation** for her valuable contributions as coordinator and lecturer in Diabetes Education and Training Course for PHC Physicians (Ajman-UAE) May 2014.
- 19. **Certificate of Appreciation**, for contributions to the Continuous Medical Education Program: 3rd Regional Conference on Diabetes and Obesity Rashid Centre for Diabetes and Research (Ajman, UAE), Nov-2013.
- 20. **Austin Hospital Medical Research Foundation Grant,** Austin Hospital (Melbourne, Australia), Jan-2009.

- 21. **Austin Hospital Medical Research Foundation Grant**, Austin Hospital (Melbourne, Australia), June-2008.
- 22. **Melbourne University Scholarship**, The University of Melbourne (Melbourne, Australia), May-2008.
- 23. **Melbourne Grant,** Department of Medicine, The University of Melbourne and Austin Health (Melbourne, Australia), April-2008.
- 24. ANS Award, Australian Neuroscience Society (Melbourne, Australia), January-2008.
- 25. **Austin Hospital Medical Research Foundation Scholarship**, Austin Hospital (Melbourne, Australia), October-2007.
- 26. **AHMRW Best Poster Presentation Award**, Department of Medicine and Austin Health, The University of Melbourne (Melbourne, Australia), October-2007.
- 27. **Melbourne Research Scholarship**, The University of Melbourne (Melbourne, Australia), 2005-2008.
- 28. **Dean's Award for Academic Excellence**, The University of Melbourne (Melbourne, Australia), 2005.

Current Projects & Publications

- Ankita Srivastava, <u>Mussa</u>, <u>B.M</u>. Effects of varying glucose concentrations on the expression of ACE2 in hypothalamic neurons and its implications in COVID-19 susceptibility. *Submitted*.
- 2. Ankita Srivastava, Reeja Rajan, Sallam Hasan Abdallah, Amir Ali Khan, <u>Mussa, B.M.</u> Cryopreservation and validation of differentiated PDGFRα-positive cells for long term usage in experimentation. *Submitted*.
- 3. <u>Mussa, B.M</u>, Salah Abusnana, Rifat Hamoudi, Ankita Srivastava, Abeer Al-Habshi, Thenmozhi Venkatachalam, Elamin Abdelgadir, Alaaeldin Bashier, Fatheya Al Awadi, Khadija Hafidh. Genetic and transcriptomic analysis of hyperlipidemia in Emirati patients with type 1 diabetes mellitus using saliva and blood samples. *Submitted*.
- 4. Noor Amar, <u>Mussa</u>, <u>B.M.</u> Ahmed Elkhapery, Salah Abusnana. <u>Identification of risk factors for development of resistance hypertension in patients with type 2 diabetes</u>. Submitted.
- 5. <u>Mussa, B.M.</u> Narjes Saheb Sharif-Askari, Nabil Sulaiman, Salah Abusnana. **The glycemic control in Emirati Diabetic Women with Thyroid Dysfunction**. *Submitted*.

- 6. Verberne AJM, <u>Mussa BM</u>. Neural control of pancreatic peptide hormone secretion. Peptides. 2022 Feb 18;152:170768.
- 7. <u>Mussa, B.M.</u> Srivastava, A. Mohammed, Abeer Aidarous, Halwani, R. Abusnana, S. Inflammatory Biomarkers Levels in T2DM Emirati Patients with Diabetic Neuropathy. Diabetes Metab Syndr Obes. 2021 Jul 26;14:3389-3397.
- 8. <u>Mussa, B.M.</u>, Khan, A. Srivastava, A. Abdallah, S. Differentiated fibroblast-like cells: a novel invitro model to study the effects of hyperglycemia on expression of neuronal nitric oxide synthase. Int J Mol Sci. 2021 Mar 29;22(7):3514.
- 9. <u>Mussa, B.M.</u> Srivastava, A. Mohammed, A. Verberne, A.J.M. Covid-19 and neurological impairment: hypothalamic circuits and beyond. Viruses. 2021 Mar 17;13(3):498.
- 10. Al Zoubi Y, <u>Mussa B.M.</u>, Srivastava A, Mohammed AK, Abdelgadir E, Bashier A, Awadi FA, Abusnana S. Differential Expression of Inflammatory Markers in Hypoglycemia Unawareness Associated with Type 1 Diabetes: A Case Report. Brain Sci. 2020 Dec 25;11(1):E17.
- 11. Mukhopadhyay, D. Mussa B.M. Identification of Novel hypothalamic MicroRNAs as a Promising Therapeutics for SARS-CoV-2 by regulating ACE2 and TMPRSS2 expression: An In silico Analysis. Brain Sci. 2020 Sep 25;10(10): E666. doi: 10.3390/brainsci10100666. PMID: 32992681.
- 12. <u>Mussa, B.M.</u> Srivastava, A. Mohammed, A. Verberne, A.J.M. Nitric oxide interacts with cholinoceptors to modulate insulin secretion by pancreatic β-cells. Accepted, Pflügers Archiv European Journal of Physiology, 2020. Oct;472(10):1469-1480. doi: 10.1007/s00424-020-02443-9.
- 13. <u>Mussa, B.M.</u> Taneera J, Mohammed, A. Srivastava, A. Mukhopadhyay, D. Sulaiman N. Potential role of hypothalamic microRNAs in regulation of FOS and FTO expression in response to hypoglycemia. *J Physiological Science*. 2019 Nov;69(6):981-991.
- 14. <u>Mussa, B.M</u> Schauman, M. Kumar, V. Skaria, S. Abusnana, S (2019). Personalized intervention to improve stress and sleep patterns for glycemic control and weight management in obese Emirati patients with type 2 diabetes: a randomized controlled clinical trial. *Diabetes, metabolic syndrome and obesity: targets and therapy.* 2020. 12:991-999.
- 15. Shieb M, Koruturk S, Srivastava A, <u>Mussa B.M</u>. Growth of diabetes research in United Arab Emirates: current and future perspectives. *Curr Diabetes Rev.* Curr Diabetes Rev. 2020;16(4):395-401.
- 16. <u>Mussa, B.M.</u> Sood S. Verberne, T. (2018). **Implication of coupled mechanisms of gastric emptying and pancreatic secretory function in diabetic gastroparesis**. *World J Gastroenterol*. 14;24 (34):3821-3833

- 17. <u>Mussa, B.M.</u> Hamodi, R and Abusnana, S (2018). Association trends between antihypertensive drug therapies and diastolic hypotension in Emirati patients with type 2 diabetes *Diabetes Therapy*. 9(5):1853-1868.
- 18. Al Shaikh YG, Haytham Shieb MM, Koruturk S, Alghefari A, Hassan Z, <u>Mussa B</u> (2018). The symptoms and risk of sleep apnea among adults in the United Arab Emirates. *Ann Thorac Med.* 13(3):168-174.
- 19. Taneera J, <u>Mussa B.M.</u> Saber-Ayad M, Dhaiban S, Aljaibeji H & Sulaiman N (2017). Maturity-Onset Diabetes of the Young: An Overview with Focus on the Middle East. *Curr Mol Med.* 17(8):549-562.
- 20. <u>Mussa, B.M.</u> & Verberne, A.J.M. (2013). The dorsal motor nucleus of the vagus and regulation of pancreatic secretory function. *Experimental Physiology*, 98: 25-37.
- 21. <u>Mussa, B.M.</u>, Sartor, D.M. & Verberne, A.J.M. (2011). **Effects of nitric oxide synthase blockade on dorsal vagal stimulation-induced pancreatic insulin secretion.** *Brain Research*, 1394: 62-70.
- 22. <u>Mussa, B.M.</u>, Sartor, D.M. & Verberne, A.J.M. (2010). **Dorsal vagal preganglionic neurons: Differential responses to CCK₁ and 5HT₃ receptors stimulation.** *Autonomic Neuroscience***, 156: 36-43.**
- 23. Verberne, A.J.M., <u>Mussa</u>, <u>B.M.</u> & Sartor, D.M. (2010). Pancreatic preganglionic neurons: differential responses to cck 1 and 5-ht 3 receptor stimulation. *The FASEB Journal*. DOI: 10.1096/fasebj.24.1_supplement.623.5.
- 24. <u>Mussa, B.M.</u>, Sartor, D.M. & Verberne, A.J.M. (2008). Activation of CCK₁ and 5HT₃ receptors increases the discharge of pancreatic vagal afferents. *European Journal of Pharmacology*, 601: 198-206.
- 25. <u>Mussa, B.M.</u> & Verberne, A.J.M. (2008). Activation of the dorsal vagal nucleus increases pancreatic exocrine secretion in the rat. *Neuroscience Letters*, 433: 71-76.
- 26. <u>Mussa, B.M.</u> & Verberne, A.J.M. (2008). Localization of pancreatic preganglionic neurons within the rat dorsal vagal nucleus. *The FASEB Journal*. DOI: 10.1096/fasebj.22.1_supplement.1171.3.

Communication and Conferences

- 1. **Bashair M. Mussa.** Non-invasive Approach of Using Saliva to Investigate the Common Upregulated Genes in T1DM Associated Complications. **12**th **Emirates Diabetes and Endocrine Virtual Congress.** Online 24-27 February 2022.
- 2. **Bashair M. Mussa, Ankita Srivastava, Rakhee K. Ramakrishnan, Anthony JM Verberne.** Role of FOS and BECLIN1 in hypothalamic autophagy associated with hypoglycemia-associated autonomic failure. *Australasian Diabetes Congress.* Online, 11-13 August 2021.
- 3. **Bashair M. Mussa "Invited Speaker"**. Complication associated with type 1: can genetic studies tell us more? *11th Emirates Diabetes and Endocrine Virtual Congress*, 4-6 March 2021.
- 4. **Bashair M. Mussa**, Salah Abusnana, Rifat Hamoudi, Ankita Srivastava, Abeer Al-Habshi, Elamin Abdelgadir, Alaaeldin Bashier, Fatheya Al Awadi, Khadija Hafidh. Investigating the genetic signature of hyperlipidemia in Emirati patients with type 1 diabetes mellitus using saliva and blood samples: a multicenter study. *Australasian Diabetes Congress*. Online, 11-13 November 2020.
- 5. **Bashair M. Mussa "invited speaker".** New molecular insights into impaired awareness of hypoglycemia associate with diabetes. *Diabetes, Obesity, and Psychiatry-EHMT Congress*, Stockholm-Sweden March 2020 (Postponed due Corona Virus Outbreak).
- 6. **Bashair M. Mussa "invited speaker".** New insights into Diabetic Neuropathy. Diabetes Awareness Day. College of Medicine, University of Sharjah, UAE, 25th November 2019.
- Bashair M. Mussa, Ankita Srivastava, Abdul Khader Mohammed, Anthony J.M. Verberne. Cytokine-stimulated nitric oxide interacts with cholinoceptors to modulate insulin secretion by pancreatic β-cells. 10th Emirates Diabetes & Endocrine Congress, Dubai-UAE, February 2020.
- 8. **Bashair M. Mussa "invited speaker".** Electrophysiological and molecular approaches to investigate neuroglycopenia: pros and cons. *5th Current Trend in Biotechnology* Dubai April 2019.
- 9. **Bashair M. Mussa.** Identification of potential biomarker for early detection of impaired awareness of hypoglycemia. *9th Emirates Diabetes & Endocrine Congress*, *Dubai-UAE*, *February 2019*.
- 10. **Bashair M. Mussa** Impaired awareness of hypoglycemia: neurophysiological and molecular perspectives. *6th Emirati-German Congress in Medicine*. *November 2018*. *Sharjah UAE*.

- 11. Ankita Srivastava, **Bashair M. Mussa**, Abdul Khader Mohammed. Beta-cell function and failure: a focus on the interaction between peripheral cholinergic pathway and nitric oxide to regulate insulin secretion. *5th Current Trend in Biotechnology* Dubai April 2019.
- 12. **Bashair M. Mussa "invited speaker".** Management of glycemic control and weight gain in Type 2 diabetes using new Biotechnological Applications. *4th Current Trend in Biotechnology* Dubai April 2018.
- 13. **Bashair M. Mussa**, Rifat Hamodi, Ahd Alnosh, Nor Amer, Salah Abusnana. A correlation between diastolic hypotension and antihypertensive medications in Emirati patients with type 2 diabetes 8th Emirates Diabetes & Endocrine Congress, Dubai-UAE. February 2018.
- 14. Noor Amar, **Bashair M. Mussa**, Hessa Qatami, Salah Abusnana. Treatment of resistant hypertension and glycemic control in Emirati patients with type 2 diabetes. *International Diabetes Federation (IDF) meeting* UAE, December 2017.
- 15. Alaa Ali., Saja Al Taher, Nafisa Abbasher, Namo Hamawndy, Sara Bin Khadra, Bashair M Mussa. Diabetes-induced depression: Brain-Derived Neurotrophic Factor as a promising therapeutic target 3rd Current Trends in Biotechnology, Dubai-UAE, April 2017.
- 16. **Bashair Mussa**, Rifat Hamodi, Ahd Alnosh, Nor Amer, Salah Abusnana. Angiotensin II receptor blockers and sulfonylureas are too good for treating hypertension in Emirati patients with type 2 diabetes *Australian Diabetes Society Meeting*. Perth Australia August 2017.
- 17. **Bashair M. Mussa.** Effects of personalized lifestyle intervention in type 2 diabetes: moving beyond healthy diet and enhanced physical activity. 6th Emirates Diabetes & Endocrine Congress, Dubai-UAE, February 2016.
- 18. **Bashair M. Mussa.** Going green embracing the digital forms of scholarly publishing. *Asian Council of Science Editors Annual Meeting*, Dubai-UAE, August 2015.
- 19. **Bashair M. Mussa.** Quality improvement project: research documentation. *Rashid Centre for Diabetes and Research*, Ajman-UAE, May 2015.
- 20. **Bashair M. Mussa.** Academic writing and publishing. **2**nd *International Conference on Medical Writing*. Ajman-UAE, March 2015.
- 21. **Bashair M. Mussa.** Prevalence of hypertension and obesity among Emirati patients with diabetes. *5th Emirates Diabetes & Endocrine Congress*, Dubai-UAE, February 2015.

- 22. **Bashair M. Mussa.** Evaluation of stress physiological response in Emirati patients with type 2 diabetes. *4th Regional Conference on Diabetes and Obesity*, Ajman-UAE, November 2014.
- 23. **Bashair M. Mussa.** Effects of nitric oxide synthase blockade on dorsal vagal stimulation-induced pancreatic insulin secretion. *4th Emirates Diabetes & Endocrine Congress*, Dubai-UAE, February 2014.
- 24. **Bashair M. Mussa**. DMV and regulation of pancreatic secretory function. *3rd Regional Conference on Diabetes and Obesity*, Ajman-UAE, November 2013.
- 25. Anthony J. M. Verberne, Daniela M. Sartor, Christian Rantzau and **Bashair M Mussa.** Effects of nitric oxide synthase inhibition on dorsal vagal stimulation-induced pancreatic insulin secretion. *Experimental Biology Meeting*, Washington DC-USA, April 2011.
- 26. **Bashair M. Mussa** and Anthony J. M. Verberne. Pancreatic preganglionic neurons: differential responses to CCK₁ and 5-HT₃ receptors stimulation. *Australian Neuroscience Society Meeting*, Canberra-Australia, January 2009.
- 27. **Bashair M. Mussa** and Anthony J. M. Verberne. Is pancreatic diabetes (type 3c diabetes) underdiagnosed and misdiagnosed? *Department of Medicine, The University of Melbourne*, Melbourne-Australia, July 2008.
- 28. **Bashair M. Mussa** and Anthony J. M. Verberne. Localization of pancreatic preganglionic neurons within the rat dorsal vagal nucleus. *Experimental Biology Meeting*, San Diego-USA, April 2008.
- 29. **Bashair M. Mussa** and Anthony J. M. Verberne. Effects of cholecystokinin and serotonin on pancreatic vagal afferent discharge. *Australian Neuroscience Society Meeting*, Hobart-Australia, January 2008.
- 30. **Bashair M. Mussa** and Anthony J. M. Verberne. Activation of CCK₁ and 5HT₃ receptors increases the discharge of pancreatic vagal afferents. *Department of Medicine*, *The University of Melbourne* Melbourne-Australia, December 2007.
- 31. **Bashair M. Mussa** and Anthony J. M. Verberne. Vagal preganglionic neurons and receptors that affect pancreatic function. *Austin Research Week, Austin Hospital*, Melbourne-Australia, October 2007.
- 32. **Bashair M. Mussa** and Anthony J. M. Verberne. Activation of the dorsal vagal nucleus increases pancreatic exocrine secretion in vivo. *Department of Medicine, The University of Melbourne* Melbourne-Australia, August 2007.
- 33. **Bashair M. Mussa** and Anthony J. M. Verberne. Activation of the dorsal vagal nucleus increases pancreatic exocrine secretion in vivo. *IBRO World Congress of Neuroscience*, Melbourne-Australia, July 2007.

- 34. **Bashair M. Mussa** and Anthony J. M. Verberne. Identification of neuronal pathways that are involved in the control of pancreatic secretion. *Austin Hospital*, Melbourne-Australia, October 2006.
- 35. **Bashair M. Mussa**. DMV: physiological roles in the gastrointestinal tract. *Department of Medicine, The University of Melbourne*, Melbourne-Australia, July 2006.

Employment History

Organization University of Sharjah (Jan 2022 - Present)

Basic Medical Science Department

College of Medicine

Sharjah, UAE

Position Associate Professor of Physiology

Organization University of Sharjah (Sept 2015 – Jan 2022)

Basic Medical Science Department

College of Medicine

Sharjah, UAE

Position Assistant Professor of Physiology

Organization Rashid Centre for Diabetes and Research (2013-2015)

Sheikh Khalifa Medical City, Ajman, UAE

Position Clinical Research Lead

Organization University of Melbourne (2006-2011)

Department of Medicine

Melbourne, Australia

Position Researcher Associate (PhD Studies)

Organization University of Melbourne (2004 – 2005)

Howard Flowery Institute

Melbourne, Australia

Position Research Scientist

Duties Conducting research studies

Referees

Professor Qutayba Hamid

University of Sharjah Sharjah, UAE

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Professor Salah Abusnana

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Dr Tony Verberne

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More referees are available upon request.