

**Dr PEDZISAI MAZENGENYA:** BSc (UZ), MSc (UZ), PhD (Wits), PGDipED (Wits)

## Academic Rank

ASSISTANT PROFESSOR

## Qualifications

- Postgraduate Diploma in Health Sciences Education
- PhD- Neurosciences
- MSc Anatomy
- BSc Anatomy

## Research field(s)

- Cellular Neurosciences
- Clinical Anatomy
- Forensic Sciences

## Publications *(Last five years)*

1. Manjatika A.T., **Mazenganya P.**, Davimes J.G. Topography and Composition of the Iliolumbar Veins in a South African Cohort: Implications for Spinal Surgery. *Asian Spine Journal*, 2023
2. Kiluba, J. B. L., Small, C., Luvhengo, T. E., & **Mazenganya, P.** (2022). A topographical description of the recurrent laryngeal nerve in paediatric cadavers. *South African Journal of Surgery*, 60(3), S50-S54.
3. Sallie S, Bidmos MA, **Mazenganya P.** Estimation of sex from the metacarpal dimensions at the nutrient foramen in white south africans. *Aust J Forensic Sci [Internet]*. 2022;54(4):533-45. Available from: [www.scopus.com](http://www.scopus.com)
4. Mwakikunga A, Manjatika A, **Mazenganya P.** Morphometric description of thoracic vertebral pedicles in adult malawian cadavers and implications for transpedicular spine fixation. *Int J Morphol [Internet]*. 2021;39(6):1575-80. Available from: [www.scopus.com](http://www.scopus.com)
5. Bidmos MA, **Mazenganya P.** Accuracies of discriminant function equations for sex estimation using long bones of upper extremities. *Int J Leg Med [Internet]*. 2021;135(3):1095-102. Available from: [www.scopus.com](http://www.scopus.com)
6. Fayman M, Beeton A, Potgieter E, Ndou R, **Mazenganya P.** Efficacy of topical tranexamic acid (cyclokapron) in "Wet" field infiltration with dilute local anaesthetic solutions in plastic surgery. *Aesthet Plast Surg [Internet]*. 2021;45(1):332-9. Available from: [www.scopus.com](http://www.scopus.com)

7. Bidmos MA, Adebisin AA, **Mazenganya P**, Olateju OI, Adegboye O. Estimation of sex from metatarsals using discriminant function and logistic regression analyses. *Aust J Forensic Sci* [Internet]. 2021;53(5):543-56. Available from: [www.scopus.com](http://www.scopus.com)
8. **Mazenganya P**, Bhagwandin A, Ihunwo AO. Putative adult neurogenesis in palaeognathous birds: The common ostrich (*struthio camelus*) and emu (*dromaius novaehollandiae*). *Int J Dev Neurosci* [Internet]. 2020;80(7):613-35. Available from: [www.scopus.com](http://www.scopus.com)
9. Mwazha A, Nhlonzi GB, **Mazenganya P**. Gastrointestinal tract plasmablastic lymphoma in HIV-infected adults: A histopathological review. *Int J Surg Pathol* [Internet]. 2020;28(7):735-48. Available from: [www.scopus.com](http://www.scopus.com)
10. **Mazenganya P**, Bhikha R. The genitourinary and reproductive systems: Interpretation of avicenna's (980–1037 AD) treatise in the canon of medicine. *Morphologie* [Internet]. 2020;104(346):196-201. Available from: [www.scopus.com](http://www.scopus.com)
11. Roig-Puiggros S, Vigouroux RJ, Beckman D, Bocai NI, Chiou B, Davimes J, Gomez G, Grassi S, Hoque A, Karikari TK, Kiffer F, Lopez M, Lunghi G, **Mazenganya P**, Meier S, Olguín-Albuerne M, Oliveira MM, Paraíso-Luna J, Pradhan J, Radiske A, Ramos-Hryb AB, Ribeiro MC, Schellino R, Selles MC, Singh S, Theotokis P, Chédotal A. Construction and reconstruction of brain circuits: Normal and pathological axon guidance. *J Neurochem* [Internet]. 2020;153(1):10-32. Available from: [www.scopus.com](http://www.scopus.com)
12. Bacci N, **Mazenganya P**, Billings BK. Myositis ossificans traumatica of the piriformis muscle: A rare mature case in an adult african male. *Surg Radiol Anat* [Internet]. 2019;41(12):1513-7. Available from: [www.scopus.com](http://www.scopus.com)
13. Mokoena P, Billings BK, Gibbon V, Bidmos MA, **Mazenganya P**. Development of discriminant functions to estimate sex in upper limb bones for mixed ancestry south africans. *Sci Justice* [Internet]. 2019;59(6):660-6. Available from: [www.scopus.com](http://www.scopus.com)
14. Nkomozezi P, **Mazenganya P**, Ihunwo AO. Quantitative analysis of age and life-history stage related changes in DCX expression in the male japanese quail (*cortunix japonica*) telencephalon. *Int J Dev Neurosci* [Internet]. 2019;74:38-48. Available from: [www.scopus.com](http://www.scopus.com)
15. Nkomozezi P, **Mazenganya P**, Ihunwo AO. Age-related changes in ki-67 and DCX expression in the BALB/ c mouse (*mus musculus*) brain. *Int J Dev Neurosci* [Internet]. 2019;72:36-47. Available from: [www.scopus.com](http://www.scopus.com)
16. Nyirenda, T., Bacci, N., Nchabeleng, E., Billings, B. K., Ndou, R., & **Mazenganya, P.** (2018). Bilateral ectopic eruption of permanent maxillary canines into the incisive fossa, evaluated using Micro Focus X-ray Computed Tomography: A Case study and brief literature review. *South African Dental Journal*, 73(3), 157-159.
17. Davimes JG, Bacci N, **Mazenganya P**. Evidence of the sternalis muscle in two south african cadavers. *Surg Radiol Anat* [Internet]. 2018;40(11):1313-7. Available from: [www.scopus.com](http://www.scopus.com)
18. **Mazenganya P**, Bhikha R. Revisiting avicenna's (ad 980–1037) anatomical concepts of the musculoskeletal and peripheral nervous systems in the canon of medicine. *AMHA Acta Med Hist Adriat* [Internet]. 2018;16(2):267-82. Available from: [www.scopus.com](http://www.scopus.com)
19. **Mazenganya P**, Bhikha R. Revisiting avicenna's (980–1037 AD) anatomy of the abdominal viscera from the canon of medicine. *Morphologie* [Internet]. 2018;102(338):225-30. Available from: [www.scopus.com](http://www.scopus.com)
20. **Mazenganya P**, Bhikha R. A critical appraisal of 11th century treatise by ibn sina (avicenna) on the anatomy of the vascular system: Comparison with modern anatomic descriptions. *Morphologie* [Internet]. 2018;102(337):61-8. Available from: [www.scopus.com](http://www.scopus.com)

21. Fasemore MD, Bidmos MA, Mokoena P, Imam A, Billings BK, **Mazengenya P**. Dimensions around the nutrient foramina of the tibia and fibula in the estimation of sex. *Forensic Sci Int* [Internet]. 2018;287:222.e1,222.e7. Available from: [www.scopus.com](http://www.scopus.com)
22. **Mazengenya P**, Bhikha R. Reply to: Ibn sina and galen were right: The heart exhibits right to left communication between the fibers of the muscular part of the interventricular septum. *Arch Iran Med* [Internet]. 2018;21(3):135-6. Available from: [www.scopus.com](http://www.scopus.com)
23. **Mazengenya P**, Bhagwandin A, Manger PR, Ihunwo AO. Putative adult neurogenesis in old world parrots: The congo african grey parrot (*psittacus erithacus*) and timneh grey parrot (*psittacus timneh*). *Front Neuroanat* [Internet]. 2018;12 Available from: [www.scopus.com](http://www.scopus.com)
24. Nkomozezi P, **Mazengenya P**, Ihunwo AO. Changes in neurogenesis with post-hatching age in the male japanese quail (*cortunix japonica*) brain. *Acta Neurobiol Exp* [Internet]. 2018;78(2):173-86. Available from: [www.scopus.com](http://www.scopus.com)
25. Mokoena P, Billings BK, Bidmos MA, **Mazengenya P**. Sex estimation using dimensions around the nutrient foramen of the long bones of the arm and forearm in south africans. *Forensic Sci Int* [Internet]. 2017;278:404.e1,404.e5. Available from: [www.scopus.com](http://www.scopus.com)
26. **Mazengenya P**, Bhagwandin A, Nkomozezi P, Manger PR, Ihunwo AO. Putative adult neurogenesis in two domestic pigeon breeds (*columba livia domestica*): Racing homer versus utility carneau pigeons. *Neural Regen Res* [Internet]. 2017;12(7):1086-96. Available from: [www.scopus.com](http://www.scopus.com)
27. **Mazengenya P**, Ekpo O. Unusual foramen in the middle cranial fossae of adult black south african skull specimens. *Surg Radiol Anat* [Internet]. 2017;39(7):815-8. Available from: [www.scopus.com](http://www.scopus.com)
28. Chengetanai S, Nchabeleng EK, Bacci N, Billings BK, **Mazengenya P**. Supernumerary lumbar ribs: A rare occurrence on an adult african male skeleton. *Anat Cell Biol* [Internet]. 2017;50(2):155-8. Available from: [www.scopus.com](http://www.scopus.com)
29. **Mazengenya P**, Bhikha R. An analysis of historical vignettes by ibn sina in the canon of medicine on the structure and function of the cardiorespiratory apparatus. *Arch Iran Med* [Internet]. 2017;20(6):386-8. Available from: [www.scopus.com](http://www.scopus.com)
30. **Mazengenya P**, Bhikha R. A critique on avicenna's (980 – 1037 A.D) studies on anatomy of the upper respiratory system and some otorhinolaryngologic concepts. *Bangladesh J Med Sci* [Internet]. 2017;16(2):188-93. Available from: [www.scopus.com](http://www.scopus.com)
31. **Mazengenya P**, Bhika R. The structure and function of the central nervous system and sense organs in the canon of medicine by avicenna. *Arch Iran Med* [Internet]. 2017;20(1):67-70. Available from: [www.scopus.com](http://www.scopus.com)
32. **Mazengenya P**. Multiple variations of the renal and testicular vessels: Possible embryological basis and clinical importance. *Surg Radiol Anat* [Internet]. 2016;38(6):729-33. Available from: [www.scopus.com](http://www.scopus.com)
33. **Mazengenya P**, Bhikha R. An analysis of the structural and functional anatomy of the spine as viewed by avicenna (980-1037 AD). *Res J Med Sci* [Internet]. 2016;10(6):676-82. Available from: [www.scopus.com](http://www.scopus.com)
34. **Mazengenya P**, Billings B. Topographic and morphometric features of the nutrient foramina of the fibula in the south african mixed-ancestry population group and their surgical relevance. *Eur J Anat* [Internet]. 2016;20(4):329-36. Available from: [www.scopus.com](http://www.scopus.com)

35. **Mazengenya P**, Fasemore MD. Morphometric studies of the nutrient foramen in lower limb long bones of adult black and white south africans. *Eur J Anat* [Internet]. 2015;19(2):155-63. Available from: [www.scopus.com](http://www.scopus.com)

36. Ngwenya A, Patzke N, Spocter MA, Kruger J-, Dell L-, Chawana R, **Mazengenya P**, Billings BK, Olaleye O, Herculano-Houzel S, Manger PR. The continuously growing central nervous system of the Nile crocodile (*Crocodylus niloticus*). *Anat Rec* [Internet]. 2013;296(10):1489-500. Available from: [www.scopus.com](http://www.scopus.com)

### **Published abstracts**

1. **Mazengenya, P.**, Bhagwandin, A., & Ihunwo, A. O. (2019, July). Adult neurogenesis in the paleognathous birds: the common ostrich (*Struthio camelus*) and emu (*Dromaius novaehollandiae*). In *JOURNAL OF NEUROCHEMISTRY* (Vol. 150, pp. 118-118). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY.

2. Ihunwo, A. O., Nkomozezi, P., & **Mazengenya, P.** (2019). Time-course changes in neuronal proliferation and incorporation in avian, amphibian and mammalian brains. *IBRO Reports*, 6, S339.

3. Ihunwo, A. O., Shehu, A. M., **Mazengenya, P.**, & Nkomozezi, P. (2022, August). Glial fibrillary acidic protein (GFAP) distribution in brains of juvenile, subadult and adult Japanese quail (*Coturnix japonica*). In *JOURNAL OF NEUROCHEMISTRY* (Vol. 162, pp. 75-75). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY.

4. Ihunwo, A. O., Nkomozezi, P., & **Mazengenya, P.** (2019). Time-course changes in neuronal proliferation and incorporation in avian, amphibian and mammalian brains. *IBRO Reports*, 6, S339.

5. **Mazengenya P**, Fasemore MD: Morphometric studies of the nutrient foramen in lower limb long bones of adult black and white South Africans. (XXIV International Symposium on Morphological Sciences, 2<sup>nd</sup> -6<sup>th</sup> September, 2015, Istanbul, Turkey). *Anatomy*. 9 (S2): S195

6. Nkomozezi P, **Mazengenya P**, Manger P and Ihunwo AO: Time-course changes in PCNA and DCX expression in the juvenile and adult Japanese quail brains. (XXIV International Symposium on Morphological Sciences, 2<sup>nd</sup> -6<sup>th</sup> September, 2015, Istanbul, Turkey). *Anatomy*. 9 (S2): S195

### **Courses Taught (Last five years)**

- Cardiovascular system and Blood Block
- Respiratory Block
- Renal Block
- Endocrine and Reproductive System Block
- Musculoskeletal Block
- Gastrointestinal Block
- General Concepts Block
- Neuroscience Block
- Special Sense
- Head and Neck and Skin Block
- Embryology
- Histology
- Gross Anatomy

## Professional Experience

- **09/2018-08/2019**- Senior Lecturer: School of Anatomical Sciences, University of the Witwatersrand, South Africa
- **01/2010 – 09/2018**- Lecturer: School of Anatomical Sciences, University of the Witwatersrand, South Africa
- **01/2009 – 01/2010**- Lecturer: Department of Anatomy, University of Zambia, Zambia
- **10/2007 – 01/2009**- Lecturer: Department of Anatomy, University of Zimbabwe, Zimbabwe
- **05/2005 – 10/2007**- Graduate teaching assistant: Department of Anatomy, University of Zimbabwe, Zimbabwe
- **01/2003 – 05/2005**- Demonstrator of Anatomy: Department of Anatomy, University of Zimbabwe

## Committees Work

- 2021-Present: Student Life and Academic Advising
- 2019-2020: Research and Ethics committee
- 2020-2021: Foundation year and GE requirements committee
- 2019 -2020: Curriculum Committee
- 2019 -2020: Student Affairs and Academic Advising
- 2019 -2020: Foundation Year and GE Requirements Committee
- 2019-Present: College Sport representative

## Honors and Awards

- 09/2022: Ajman University Internal Research Grant-2022-IRG-MED-3: Systematic characterization of the neuromodulatory systems in avian species
- 09/2019: Ajman University Internal Research Grant - IRG-2018-A-MED-03: Effect of Trypanosoma brucei brucei (T.b. brucei) infection on adult neurogenesis in mice models
- 07/2019: University of the Witwatersrand, Faculty of health sciences: Award presented for outstanding research achievements
- 07/2018: University of the Witwatersrand, Faculty of health sciences: Award presented for outstanding research achievements
- 2019: International Society for Neurochemistry Committee for Aid and Education in Neurochemistry (ISN-CAEN)- USD (\$) 3300.00
- 2019: International Brain Research Organization (Africa Region)- Early Career Award- 5000 EUR
- 2018: International Society of Neurochemistry and Journal of Neurochemistry (ISN-JNC) 2nd Flagship school: Participation and travel grant
- 2015: International Brain Research Organization (IBRO)/ Grass foundation travel grant
- 2007: International Brain Research Organization (IBRO) travel grants

- 2008: International Brain Research Organization (IBRO) travel grant (twice)

## Other Contributions and Achievements

- **Journal Reviewing in the following journals:**
  - Surgical and Radiologic Anatomy (SARA)
  - International Medical Case Reports Journal,
  - Sultan Qaboos University Medical Journal,
  - Erciyes Medical Journal,
  - EDORiUM Journal of Anatomy and Embryology.
  - Forensic Sciences International reports
  - Journal of integrative medicine
- **Membership of professional Associations**
  - Anatomical Society of Southern Africa (ASSA)
  - International Society for Neurochemistry (ISN)
  - Society of Neuroscience in Africa (SONA)
  - International Brain Research Organization (IBRO)