



Freeborn Rwere

Instructor, Anesthesiology, Perioperative and Pain Medicine

Bio

ACADEMIC APPOINTMENTS

- Instructor, Anesthesiology, Perioperative and Pain Medicine

Publications

PUBLICATIONS

- **The JPET Editorial Fellowship: Opening the Blinds to the Peer Review and Editorial Process.** *The Journal of pharmacology and experimental therapeutics*
Ladumor, M. K., Mielnik, C. A., Peterson, C. D., Rwere, F., Gross, E. R.
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- **Characterization of novel genetic mutations in aldehyde dehydrogenase 2 that cause alcohol flushing in humans**
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AMER SOC PHARMACOLOGY EXPERIMENTAL THERAPEUTICS.2023
- **Inhibitory and in silico molecular docking of Xeroderma stuhlmannii (Taub.) Mendonca & E.P. Sousa phytochemical compounds on human #-glucosidases.** *Journal of ethnopharmacology*
Nyathi, B., Bvunzawabaya, J. T., Venissa P Mudawarima, C., Manzombe, E., Tsotsoro, K., Selemani, M. A., Munyuki, G., Rwere, F.
2023; 312: 116501
- **SGLT2 inhibitor ameliorates endothelial dysfunction associated with the common ALDH2 alcohol flushing variant.** *Science translational medicine*
Guo, H., Yu, X., Liu, Y., Paik, D. T., Justesen, J. M., Chandy, M., Jahng, J. W., Zhang, T., Wu, W., Rwere, F., Zhao, S. R., Pokhrel, S., Shivnaraine, et al
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- **A human TRPV1 genetic variant within the channel gating domain regulates pain sensitivity in rodents.** *The Journal of clinical investigation*
He, S., Zambelli, V. O., Sinharoy, P., Brabenec, L., Bian, Y., Rwere, F., Hell, R. C., Stein Neto, B., Hung, B., Yu, X., Zhao, M., Luo, Z., Wu, et al
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- **Natural products for the treatment and management of diabetes mellitus in Zimbabwe-a review** *FRONTIERS IN PHARMACOLOGY*
Usai, R., Majoni, S., Rwere, F.
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- **Influence of CYP2C19*17 Genetic Polymorphism on the Steady-State Concentration of Escitalopram in Patients with Recurrent Depressive Disorder.** *Psychopharmacology bulletin*
Zastrozhin, M. S., Skryabin, V., Rwere, F., Petukhov, A. E., Pankratenko, E. P., Pozdniakov, S. A., Ivanchenko, V. A., Noskov, V. V., Zaytsev, I. A., Vinokurova, N. V., Horyaev, D. S., Vlasovskih, R. V., Bryun, et al
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- **Aldehydes, Aldehyde Metabolism, and the ALDH2 Consortium.** *Biomolecules*
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2022; 12 (6)

- **A new preconcentration technique for the determination of PGMs and gold by fire assay and ICP-OES** *JOURNAL OF THE SOUTHERN AFRICAN INSTITUTE OF MINING AND METALLURGY*
Masasire, A., Rwere, F., Dzomba, P., Mupa, M.
2022; 122 (2): 29-36
- **Phytochemical characterization and in vitro antibacterial activity of *Xeroderris stuhlmannii* (Taub.) Mendonca & EP Sousa bark extracts** *SOUTH AFRICAN JOURNAL OF BOTANY*
Selemani, M. A., Kazingizi, L. F., Manzombe, E., Bishi, L. Y., Mureya, C., Gwata, T. T., Rwere, F.
2021; 142: 344-351
- **The FMN "140s Loop" of Cytochrome P450 Reductase Controls Electron Transfer to Cytochrome P450** *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*
Rwere, F., Im, S., Waskell, L.
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- **Characterization of a Human ALDH2 Mutant that Causes Alcohol Flushing in Non-east Asians**
Rwere, F., White, J., Chen, C., Mochly-Rosen, D., Gross, E.
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- **Structural and Kinetic Studies of Asp632 Mutants and Fully Reduced NADPH-Cytochrome P450 Oxidoreductase Define the Role of Asp632 Loop Dynamics in the Control of NADPH Binding and Hydride Transfer.** *Biochemistry*
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- **Mutants of Cytochrome P450 Reductase Lacking Either Gly-141 or Gly-143 Destabilize Its FMN Semiquinone.** *The Journal of biological chemistry*
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- **Kinetic and structural characterization of the interaction between the FMN binding domain of cytochrome P450 reductase and cytochrome c.** *The Journal of biological chemistry*
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2015; 290 (8): 4843-55
- **Structural and functional characterization of a cytochrome P450 2B4 F429H mutant with an axial thiolate-histidine hydrogen bond.** *Biochemistry*
Yang, Y., Zhang, H., Usharani, D., Bu, W., Im, S., Tarasev, M., Rwere, F., Pearl, N. M., Meagher, J., Sun, C., Stuckey, J., Shaik, S., Waskell, et al
2014; 53 (31): 5080-91
- **Resonance Raman determination of vinyl group disposition in different derivatives of native myoglobin and its heme-disoriented form** *JOURNAL OF RAMAN SPECTROSCOPY*
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- **Resonance Raman interrogation of the consequences of heme rotational disorder in myoglobin and its ligated derivatives.** *Biochemistry*
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2008; 47 (48): 12869-77
- **The impact of altered protein-heme interactions on the resonance Raman spectra of heme proteins. Studies of heme rotational disorder.** *Biopolymers*
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