



L. Felipe Barros, a medically qualified (University of Chile) marshalino-institutano, earned his PhD from the same university in 1993, advised by David Yudilevich. From 1993 to 1996 he was a Wellcome Trust Fellow in Steve Baldwin's lab in Leeds, UK, returning as a Lecturer in 1996 to the University of Chile. In 2000, he joined the Centro de Estudios Científicos in Valdivia. How are the fluxes of energy, matter and information interwoven in biological systems? How do cells adapt to workload? His favorite research model is the brain. His team searches for new metabolic phenomena using high-resolution optical techniques. Recent Selected

Publications Baez

a-Lehnert et al. Non-Canonical Control of Neuronal Energy Status by the Na

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Pump. Cell Metab. 29: 668-680, 2019.

Fernández-Moncada et al. Neuronal control of astrocytic respiration through a variant of the Crabtree effect. Proc Natl Acad Sci U S A. 115: 1623-1628, 2018.

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Mächler et al. In vivo evidence for a lactate gradient from astrocytes to neurons. Cell Metab. 23: 94-102, 2016.

Lerchundi et al.  $\text{NH}_4^+$  triggers the release of astrocytic lactate via mitochondrial pyruvate shunting. Proc Natl Acad Sci U S A. 112: 11090-5, 2015.

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