

Calico + Google

- ✓ CELL CULTURE
- ✓ HYPOXIA
- ✓ BLOOD OXYGEN LEVELS

A SOLID BUSINESS CASE IN COLLABORATION WITH CALICO LABS - GOOGLE

GENERAL INFORMATION ABOUT THE PROJECT



TARGET OF THE PROJECT:

Hypoxia in Preclinical Imaging



DEPARTMENT:

Preclinical Imaging



HEAD OF PROJECT MANAGEMENT:

Florian Schmid



ROLE OF MCQ INSTRUMENTS:

To adjust the O₂ concentration on the fly to achieve target blood oxygen levels.

MORE INFORMATION ABOUT THE COMPANY

Calico LLC is an American research and development biotech company founded on September 18, 2013 by Bill Maris and backed by Google with the goal of combating aging and associated diseases. In Google's 2013 Founders Letter, Larry Page described Calico as a company focused on "health, well-being, and longevity". The company's name is an acronym for "California Life Company".

DESCRIPTION OF THE APPLICATION AND THE TARGET

Calico Labs, an American research and development biotech company founded on 2013 and backed by Google with the goal of combating aging and associated diseases. Calico Labs uses the gas mixer in an

experimental setup to study hypoxia in rodents, and generate a gas mix to expose rodents to defined lower O₂ concentrations. They adjust the O₂ concentration on the fly to achieve target blood oxygen levels.

BENEFITS AND SAVINGS

Buying cylinders of natural gas blends is expensive and limits the availability of mixtures that may be required. Gas cylinders are also large and often require special storage arrangements, as well as taking up valuable space.

By using the MCQ gas blender it is possible to create a gas mixture at any time, to a certain degree, and different concentrations. The ability to blend gas on-demand is an incredibly powerful tool and provides a level of flexibility that gas cylinders cannot provide



GAS MIXER VS GAS CYLINDER

The ability to blend O₂ simulations on-demand is an incredibly powerful tool in the development and provides a level of flexibility that gas cylinders cannot provide.



MICRO FLOW RATES: **NO CUT-OFF**

Our GB100 Series allows the Calico Labs to control the flow in all the calibration range, from 0.1 mL/min to 500 mL/min with NO cut-off.



FLEXIBILITY:

By using the MCQ gas blender it is possible to dial up a simulation of hypoxia condition at any time, and to a certain degree, different concentrations of O₂.



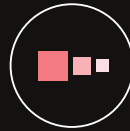
EASY TO USE **SOFTWARE:**

Thanks to our Software PRO Version and its easy-to-use user interface, now the Calico Labs can easily set all the experiment through our software.



HIGH ACCURACY - LOW RATE:

Thanks to our revolutionary method without the Cut-Off, every gas flow has a high accuracy making possible to have a stable flow also for lower flow-range.



SUCCESSFUL ACHIEVEMENT:

The MCQ gas blender is used to adjust the O₂ concentration on the fly to achieve target blood oxygen levels.

READY TO TALK ABOUT YOUR SOLUTION?

info@mcqinst.com - www.mcqinst.com