NORTHERN ARIZONA UNIVERSITY

Center for Bioengineering Innovation

2017 Lecture Series

Small Molecule HIF-2a Antagonists and Their Therapeutic Applications

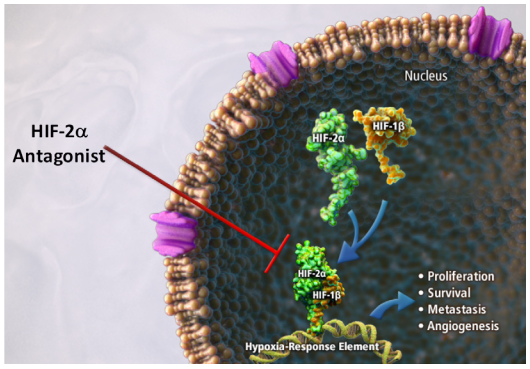
Dr. Eli Wallace
Chief Scientific Officer
Peloton Therapeutics

Friday, September 29, 2017, 3-4 p.m.
Science and Health (Building 36), room 105

Dr. Eli M. Wallace is Chief Scientific Officer at Peloton Therapeutics, where he leads a multidisciplinary team of 22 scientists in the pursuit of novel therapeutics for the treatment of cancer and other diseases.

Peloton Therapeutics is leading the field in developing innovative therapies targeting the regulation of gene expression, including the first antagonists of hypoxia inducible factor-2α (HIF-2α) to enter clinical development.

In this lecture, Dr. Wallace will discuss his work with regard to HIF-2α, a transcription factor that drives the expression of multiple gene products impacting metabolism, angiogenesis, cell proliferation, metastasis, inflammation, and evasion of anti-tumor immune responses. HIF-2α plays a key role in driving disease progression in many pathological disorders affected and propagated by hypoxia and is implicated in the development and progression of several types of cancer.



The role of HIF-2α is particularly important in clear cell renal cell carcinoma (ccRCC). In the majority of patients with ccRCC, the tumor suppressor von Hippel-Lindau protein (pVHL) that targets HIF-2α for degradation is inactivated, leading to the accumulation of HIF-2α and the transcription of genes that drive kidney cancer tumorigenesis.

Prior to his tenure at Peloton, Dr. Wallace worked in the Medicinal Chemistry department at Array BioPharma Inc., where he rose through the ranks to director. He led multiple research projects, which produced eight new chemical entities that have entered human clinical trials for the treatment of cancer, including MEK inhibitor binimetinib that is under review by the FDA for the treatment of melanoma.

Previously, Dr. Wallace worked as a Medicinal Chemist at Ciba-Geigy (Novartis) and Glaxo Wellcome (GlaxoSmithKline). He has co-authored 26 original research articles and invited reviews, and is co-inventor on 57 issued patents. Dr. Wallace was an NIH postdoctoral fellow at the University of South Carolina. He earned a BA in Chemistry from Lawrence University and a PhD in Organic Chemistry from Colorado State University.