conferenceseries.com

JOINT EVENT ON

6th European Conference on

Predictive, Preventive and Personalized Medicine & Molecular Diagnostics

&

2nd World Congress on Human Genetics

September 14-15, 2017 | Edinburgh, Scotland

PDX modeling to generate drug-resistant tumors

Michael R Briggs

Tufts Cummings School of Veterinary Medicine, USA

We developed a mouse avatar technology which involves capturing, expanding, characterizing and viably freezing primary patient tumors at low passage number to better model long-term treatment and recurrence of solid tumors as similar to the patient as possible. Through long-term dosing we are able to generate refractory tumor models resistant to normally efficacious drugs. Our process can take more than 100 days of treatment to generate drug-resistant models *in-vivo*. Currently, we implant cells or tumor pieces sourced from patient-derived primary resection. These models are incredibly powerful when used for molecular profiling to better understand predictive markers of progressive, metastatic, refractory disease, and also empirically as tools for drug discovery. It is our belief that testing new cancer therapies being developed against the very same drug-resistant tumors they are most likely to face in early clinical trials will provide a new level of translational success to future oncology drug discovery programs and improve patient experience in clinical trials.

Biography

Michael R Briggs is a Postdoctoral Fellow, University of Texas Southwestern Medical Center, He worked at the laboratory of Drs. Michael Brown and Joseph Goldstein. He was conferred EMBO Fellow, Universitat Zurich, Lab of Dr. Ernst Hafen. He pursued PhD University of California, Berkeley, laboratory of Prof. Robert Tjian and B A Biology, University of Delaware, Dean's Scholar. He is the founder of Woodland Pharmaceuticals. His team's approach involves building relevant in vitro and *in-vivo* models and his focus over the past 10 years has been to increase the likelihood of effective translation to the clinic by establishing primary patient tumor models that are much closer to the patient tumor biology than the traditional cancer cell lines.

mbriggs@woodlandpharma.com

Notes: