

31<sup>st</sup> World Congress on

## Neurology and Therapeutics

32<sup>nd</sup> International Conference on

## Neurology and Cognitive Neuroscience

33<sup>rd</sup> International Conference on

## Adolescent Medicine and Child Psychology

February 09-10, 2022

WEBINAR

Don Turner, J Neurol Neurophysiol 2022, Volume 13

### Targeted and optimized brain drug delivery

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As noted by the World Health Organization, neurological and psychiatric disorders represent the greatest global economic and health burden, where more than 1 billion people are affected and the number is rapidly growing because of the global pandemic. Even though this medical demand has been known for decades, the clinical development pipelines from the pharmaceutical industry are largely deficient, where the most recent commercialized drug for depression was approved by the FDA after three decades of effort by the entire pharmaceutical industry.

The lack of clinical advancements is not a strategic failure, but rather a direct result of well-known physiological impedances to drug delivery such as the first-pass effect and the blood-brain-barrier, which either produce significant side effects and/or prevent drugs from reaching the therapeutic target. Thankfully, researchers have discovered viable therapeutic pathways to bypass drug delivery barriers and advancements in nanomedicine will further enable drug delivery, but the greatest potential resides in emerging non-invasive medical device innovations that will provide both targeted and fully optimized drug delivery.

This keynote presentation will provide a view into the evolution of drug delivery, clinical dynamics that are motivating emerging classes of therapeutics, existing barriers that could impede advancements and the latest developments that represent great potential for global health transformation. Specific examples of current research and development will be given, with a focus on the role of non-invasive medical devices to produce targeted and optimized drug delivery via local, systemic and nose-to-brain routes. Lastly, the talk will discuss how emerging medical devices can also serve to substantially improve the well-known problem of treatment and medicine adherence, which itself is a \$300 billion per year problem and poor adherence will continue to impede even the greatest of advancements in drug delivery and nanomedicine if the problem is not resolved.

### Biography

Don has more than 28 years of experience, where he currently serves as the CEO for Neosinus Health. Don served as the Global Head of Commercialization for IBM Watson Health, Global Head of Commercialization at Merge Healthcare, Managing Director for Millennium Pharmaceuticals and Committee Chairman. He is an industry recognized thought leader and public speaker, with noted expertise in areas such as advanced R&D, precision medicine, healthcare transformation and digital health. Don has served as a keynote and guest speaker on Healthcare Transformation and Precision Medicine at top universities and conferences across the globe.