

## **Curriculum Vitae Professor Dr William E. Evans**

Name: William E. Evans



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# Research Priorities: pharmacodynamics and pharmacogenomics of anticancer agents, pediatrics, acute lymphoblastic leukaemia

William E. Evans is a clinical pharmacist and translational scientist. He is recognized for his research on the pharmacogenomics of leukaemia treatment in children. He studied the biochemical mechanisms that underlie inter-individual differences in drug response and applied these discoveries in developing new cancer treatments.

#### **Academic and Professional Career**

2021	Professor emeritus, St. Jude Children's Research Hospital, Memphis, USA
2004 - 2014	CEO, St. Jude Children's Research Hospital, Memphis, USA
2002 - 2004	Scientific Director, St. Jude Children's Research Hospital, Memphis, USA
1987 - 1988	Studies of Pharmacogenomics, University of Basel, Basel, Switzerland
1986 - 2002	Chair, Department of Pharmaceutical Sciences, St. Jude Children's Research Hospital, Memphis, USA
1975	Doctoral degree (Pharm.D), University of Tennessee, Memphis, USA

### **Honours and Awarded Memberships**

2021	Member, Tennessee Healthcare Hall of Fame, Nashville, USA
2017	Paul F. Parker Medal, American College of Clinical Pharmacy (ACCP), USA
since 2016	Member, German National Academy of Sciences Leopoldina, Germany
since 2015	Member, National Academy of Medicine, USA

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2014	Claes Nobel World Betterment Award, National Society of High School Scholars (NSHSS), USA
2014	Honorary Doctor of Humanities, Rhodes College, Memphis, USA
2013	Oscar B. Hunter Career Award, American Society for Clinical Pharmacology and Therapeutics (ASCPT), USA
2012	Remington Medal, American Pharmaceutical Association, USA
2009	Pediatric Oncology Award (shared with MV Relling), American Society of Clinical Oncology (ASCO), USA
2009	AACR Team Science Award (shared with St. Jude Faculty), American Association for Cancer Research (AACR), USA
2008	Honorary Doctor of Science, Ohio State University, Columbus, USA
2006	Rawls Palmer Progress in Medicine Award, ASCPT, USA
2005	NIH MERIT Award, National Cancer Institute (NCI), National Institutes of Health (NIH), USA
since 2002	Member, Institute of Medicine, National Academy of Sciences, USA
2002 - 2004	Executive Vice President, St. Jude Children's Research Hospital, Memphis, USA
1995	NIH MERIT Award, NCI, NIH, USA
1994	Volwiler Research Achievement Award, American Association of Colleges of Pharmacy (APhA), USA
1991	Leon Goldberg Award, ASCPT, USA
1989	Therapeutic Frontiers Lecture Award, American College of Clinical Pharmacy (ACCP), USA
1987	NIH MERIT Award, NCI, NIH, USA

#### **Research Priorities**

William E. Evans is a clinical pharmacist and pharmaceutical scientist. He is recognized for his research on the pharmacogenomics of leukaemia treatment in children. He studied the biochemical mechanisms that underlie inter-individual differences in drug response and applied these discoveries in developing new cancer treatments.

He and his team study the pharmacodynamics and pharmacogenomics of the widely used cancer chemotherapy for acute lymphoblastic leukaemia. They discovered the genetic basis for inherited differences in the enzyme "thiopurine methyltransferase" (TPMP) and defined its role in determining the toxicity risk during the development of blood cells and other blood cellular

components (haematopoiesis) in patients treated with the agents mercaptopurine and azathioprine.

More recently, his lab has used various strategies that monitor patients' genomes, such as gene expression profiling or genome sequencing of whole cohorts to discover the importance of both inherited and somatic genome variation in determining the efficacy and toxicity of chemotherapy against leukaemia.

The aim of William E. Evans and his team is to improve the safety and efficacy of treatments for children with cancer by understanding the effects of genome variation on medications. Furthermore, they seek to derive new forms of diagnosis and treatment with the help of this knowledge.