**Resume of Henry E. Young, PhD**

**NAME:** Henry E. Young, Ph.D.

**BUSINESS:** Chief Science Officer, Dragonfly Foundation for Research & Development, September, 2016-pres

Research Scientist, Dragonfly Foundation for Research & Development, 1976-2016

Chief Executive Officer and Consultant, Henry E Young PhD Regeneration Technologies, LLC, 2012-pres

Chief Science Officer, Chrysilis LLC, 2016-present

**ACADEMIC:** Tenured Professor of Anatomy, Mercer University School of Medicine, 1988-2016, Retired, September, 2016

**HIGHER EDUCATION:**

Ohio State University, Columbus, OH - B.S., Biology, 1974

University of Arkansas, Fayetteville, AR - M.S., Zoology, 1974-1977
Master's Thesis: Limb Regeneration in the Adult Salamander, *Ambystoma annulatum* Cope 1889 (Amphibia:Ambystomatidae). (Dr. Claudia F. Bailey, mentor)

Texas Tech University, Lubbock, TX - Ph.D., Anatomy, 1977-1983
Ph.D. Thesis: A Temporal Examination of Glycoconjugates During the Initiation Phase of Limb Regeneration in Adult *Ambystoma*. (Dr. Roger R. Markwald, mentor)

Case Western Reserve University, Cleveland, OH, Carbohydrate Biochemistry, 1983-1987
Postdoctoral Fellow: Isolation and Characterization of Proteoglycans and Glycoproteins within Connective Tissue Extracellular Matrices. (Dr. Arnold I. Caplan, mentor)

Rush Presbyterian Saint Luke's Medical Center, Chicago, IL, 1987-1988
Instructor: Hybridoma Technology and Carbohydrate Biochemistry (Dr. James Kimura, supervisor)

**Discoveries (19)** Scar Inhibitory Factor, Skeletal Muscle Morphogenetic Protein, Smooth Muscle Morphogenetic Protein, Cardiac Muscle Morphogenetic Protein, Scar Tissue Morphogenetic Protein, Fibrogenic Morphogenetic Protein, Adipogenic Morphogenetic Protein, Adult mesodermal (mesenchymal) stem cells (MesoSCs), Nucleated plasma particles (NucP2), Adult pluripotent germ layer lineage stem cells (GLSCs), Adult pluripotent epiblast-like stem cells (ELSCs), Adult pluripotent corona-like stem cells (CLSCs), Adult pluripotent halo-like stem cells (HLSCs), Adult totipotent blastomere-like stem cells (BLSCs) and their respective transitional stem cells: Adult pluripotent transitional germ layer lineage stem cells (Tr-GLSCs), Adult pluripotent transitional epiblast-like stem cells (Tr-ELSCs), Adult pluripotent transitional corona-like stem cells (Tr-CLSCs), Adult totipotent transitional halo-like stem cells (Tr-HLSCs), and Adult totipotent transitional blastomere-like stem cells (Tr-BLSCs).

**<u>AWARDS</u> (93):**

**Special Awards (2):** Humanism in Medicine Award – 2005 (only PhD in history of Mercer University School of Medicine to be honored with this award); Inductee: Arnold P. Gold Foundation - Gold Humanism Honor Society, 2005;

**Research Awards (3)**: Sigma Xi Research Grant-in-Aid – 1981; International Certificate of Merit for Adult Limb Regeneration – 1993; International Albert Einstein Scientific Iconic Achievement Award for Adult Stem Cell Biology – 2009.

**Teaching Awards (3)**: MUSM Hooding Award – Class of 1993, MUSM Hooding Award – Class of 1994; American Medical Women's Medical Association Gender Equity Award – 1997.

**General Awards (85):**

## Profiles:

http://www2.mercer.edu/News/Articles/2005/050601medicine2.htm
http://newwestminstercollege.ca/7ca/
http://www.youtube.com/watch?v=wj5zXVRfU2c&feature=channel_page
http://www.youtube.com/watch?v=tLpkIBCWlAY&feature=channel_page
https://www.researchgate.net/profile/Henry_Young/publications/?page=1
http://www.linkedin.com/search/fpsearch?fname=Henry+E.&lname=Young%2C+PhD&title=Professor+of+Anatomy&currentTitle=CP&company=Mercer+University+School+of+Medicine&currentCompany=CP&searchLocationType=I&countryCode=us&postalCode=31207&distance=50&keepFacets=keepFacets&page_num=1&pplSearchOrigin=ADVS&viewCriteria=1&sortCriteria=R&redir=redir
http:/www.google/Henry E Young PhD

**Research Interests**: I started studying the regeneration of tissues during limb regeneration in the adult terrestrial salamander in 1975. My thoughts were, if terrestrial salamanders can do it, why can't humans. I have spent my entire research career studying this phenomenon. The bottom line answer is HUMANS CAN REGENERATE THEIR OWN DAMAGED TISSUES USING ADULT-DERIVED STEM CELLS. My research has shown that humans contain a variety of very specific precursor cells: I have identified, isolated and/or cloned from single cells: progenitor cells, specific germ layer lineage stem cells, pluripotent stem cells, and totipotent stem cells from salamanders, avians, and 11 species of adult mammals, including humans. These cells individually and/or in toto have the capabilities of forming all tissues of the body, the germ cells, and the cell types within the embryonic portion of the placenta. I have also discovered that the human body knows far more about the repair process that I would hope to discover in several lifetimes. Our results have shown that the best repair we have seen in our in vivo non-human mammalian models [Parkinson's disease, Myocardial Infarction, Type-I Diabetes] and in vivo human models [Amyotrophic Lateral Sclerosis (ALS), Parkinson's disease, Multiple Sclerosis (MS), Chronic Inflammatory Demyelinating Polyneuropathy (CIDP), Traumatic Brain Injury, Traumatic Spinal Cord Injury, Paraplegia, Neuroparesthesias, Sciatica, Neuropathies, Blindness, Macular Degeneration, Chronic Obstructive Pulmonary Disease (COPD), Interstitial Pulmonary Fibrosis (IPF), Myocardial Infarction, Systemic Lupus Erythematosus, Articular Cartilage Injuries] have used the most primitive of our isolated single cell-cloned stem cells, the totipotent stem cells. My ultimate goal is to see adult-derived (totipotent and pluripotent) stem cells, either autologous and/or allogeneic, used to treat the various afflictions that affect human life. I am interested in the application of autologous and allogeneic adult-derived (totipotent and pluripotent) stem cells for the treatment of incurable diseases and incurable traumatic injuries.

Aug. 2011 Wrongful Death Lawsuit, April 2014 Dismissed with Prejudice

Curriculum Vitae and References available upon request