

Biography of Dr. Guillermo Gonzalez

Dr. Guillermo Gonzalez is an Assistant Professor of Astronomy at Iowa State University (ISU). Born in Havana, he and his family fled from Cuba to the United States in 1967, where he earned a Ph.D. in Astronomy from the University of Washington in 1993. Author of nearly 70 peer-reviewed scientific papers and co-author of a major college-level astronomy textbook, Dr. Gonzalez's work led to the discovery of two new planets, and he has had his research featured in *Science*, *Nature*, and on the cover of *Scientific American*.

Dr. Gonzalez's Scientific Research

In late 1995, Dr. Gonzalez began working on a series of projects examining stars with planets to see what sorts of properties they exhibited. This has been a major part of Dr. Gonzalez's scientific research, and he has published twelve articles in peer-reviewed science journals on the subject and continues to research new planets and systems. Dr. Gonzalez's research in this area led to he and his associate researchers discovering what is known as the Galactic Habitable Zone (GHZ), a term Dr. Gonzalez coined. Our star, the Sun, is one of the few stars in the Galaxy capable of supporting complex life. The sun is composed of the right amount of "metals," and its orbit about the galactic center is just right. Our solar system is also far enough away from the galactic center to not have to worry about disruptive gravitational forces or too much radiation. When all of these factors occur together, they create a region of space now known as a Galactic Habitable Zone. Dr. Gonzalez believes every form of life on our planet—from the simplest bacteria to the most complex animal—owes its existence to the balance of these unique conditions. Dr. Gonzalez has also made novel contributions by developing the idea of the moon as "Earth's lunar attic," where the moon may serve as a repository for meteorites that came originally from earth or other nearby planets. Dr. Gonzalez views the moon as a museum for the history of our solar system, and further exploration could yield great insight into our planet's own history. His work has led to feature stories in *Science* and *Nature*, two of the world's premiere scientific publications. And he and his associates wrote a cover story about GHZ in *Scientific American*.

Dr. Gonzalez's Book on Intelligent Design

In 2004, Dr. Gonzalez co-authored the book *The Privileged Planet: How Our Place in the Cosmos is Designed for Discovery*, which presents empirical evidence for the hypothesis that the universe is the product of intelligent design. Supported by a research grant from the Templeton Foundation, the book has earned praise from such eminent scientists as David Hughes, a Vice-President of the Royal Astronomical Society, Harvard astrophysicist Owen Gingerich, and Cambridge paleobiologist Simon Conway Morris. *The Privileged Planet* was developed into a documentary and shown on PBS stations around the country.

Attacks on Dr. Gonzalez's Academic Freedom

After the release of *Privileged Planet*, ISU religious studies professor Hector Avalos—faculty advisor to the campus Atheist and Agnostic Society—began publicly campaigning against Dr. Gonzalez and his work. Although Dr. Gonzalez had never introduced intelligent design into his classes, Avalos helped spearhead a faculty petition urging "all faculty" at ISU to "uphold the integrity of our university" by "reject[ing] efforts to portray Intelligent Design as science." Avalos later conceded to a local newspaper that Gonzalez was the key motive for the petition. The logical conclusion of this campaign against Dr. Gonzalez came in the spring of 2007 when ISU President Gregory Geoffroy denied Dr. Gonzalez's application for tenure.

Key Facts about Dr. Guillermo Gonzalez

- He has authored 68 peer-reviewed scientific articles in refereed science journals.
- He is an author of *Observational Astronomy*, second edition (2006), a college-level astronomy textbook published by Cambridge University Press (authors: D. Scott Birney, G. Gonzalez and D. Oesper).
- His work has been cited in *Science*, *Nature* and many other scientific journals. All told, there were nearly 1,500 citations to his articles and research in science journals by the end of 2005.
- His research led to the discovery of 2 new planets.
- He is building new technology to discover extrasolar planets.
- He served on the NASA Astrobiology Institute Review Panel in June 2003, and the National Science Foundation Advanced Technologies and Instruments review panel in January 2005.
- He has served as a referee for *Astronomical Journal*, *Astronomy & Astrophysics*, *Astrophysical Journal (and Letters)*, *Icarus*, *Monthly Notices of the Royal Astronomical Society*, *Nature*, *Naturwissenschaften*, *Publications of the Astronomical Society of Japan*, *Publications of the Astronomical Society of the Pacific*, *Origins of Life and Evolution Biospheres* and *Science*.

Key Facts about Tenure Process at Iowa State University

- According to ISU's Department of Physics and Astronomy, "[f]or promotion to associate professor, excellence sufficient to lead to a national or international reputation is required and **would ordinarily be shown by the publication of approximately fifteen papers of good quality in refereed journals**. (Physics and Astronomy Procedures and Promotion and Tenure Policy and Procedure, emphasis added, page 4.)
- Having produced 68 refereed scientific papers, Dr. Gonzalez has exceeded his own department's standard for "excellence" in research by more than 350%.

Guillermo Gonzalez Timeline

- **1963** – Guillermo Gonzalez born in Havana, Cuba.
- **1967** – Family fled Cuba to Miami, FL.
- **1970** – Received first telescope.
- **1983** – Graduated from high school, and moved away to attend the University of Arizona for astronomy program on full-tuition scholarship.
 - Featured in the *Miami Herald* at age 19 as “one of five South Florida finalists in the national Westinghouse science competition for building a device that measures conductivity changes of water from its solid to liquid states.”
- **1987** – Graduated from University of Arizona.
- **1987** – First refereed paper published in *Solar Physics*.
- **1993** – Received Ph.D. from University of Washington in astronomy.
- **1995** – Conducted postdoctoral research at the Indian Institute of Astrophysics in Bangalore; observed solar eclipse, prompting him to formulate what would later become the privileged planet hypothesis.
- **1999** – Appointed Research Assistant Professor at University of Washington.
- **2001** – Left University of Washington to become Assistant Professor of Astronomy at Iowa State University (ISU).
- **2001** – Co-authored cover story in *Scientific American*.
- **2002** – Feature story on Gonzalez’s research published in *Nature*.
 - Began construction of new telescope attachment to discover extrasolar planets.
- **2004** – Feature story on Gonzalez’s research published in *Science*.
 - *The Privileged Planet* published.
 - ISU Atheist and Agnostic Society sponsored campus forum to attack *The Privileged Planet*. Event featured religious studies professor Hector Avalos.
- **2005** – *The Privileged Planet* film screened at the Smithsonian Institute and begins airing on PBS stations around the nation.
 - Petition signed by more than 120 ISU faculty members urging “all faculty” at ISU “to uphold the integrity of our university of science and technology” by “reject[ing] efforts to portray Intelligent Design as science.”
- **2006** – ISU Atheist and Agnostic Society co-sponsored another campus event attacking intelligent design.
 - Cambridge University Press published second edition of college textbook *Observational Astronomy*, co- authored by Gonzalez.
 - Gonzalez’s research on the moon as the earth’s “lunar attic” highlighted on National Geographic Channel.
 - Gonzalez submitted application for tenure.
- **2007** – Gonzalez published his 68th peer-reviewed scientific paper and is denied tenure by ISU President Geoffroy.