

PDA Journal of Pharmaceutical Science and Technology



Preventing a Pharma Crash: A 30,000 Foot View

Govind Rao

PDA J Pharm Sci and Tech **2015**, 69 666

Access the most recent version at doi:[10.5731/pdajpst.2015.01091](https://doi.org/10.5731/pdajpst.2015.01091)

EDITOR'S NOTE

Preventing a Pharma Crash: A 30,000 Foot View

Perspective. This is something that takes a long time and a rich, varied life to develop. In this issue of the *PDA Journal of Pharmaceutical Science and Technology*, we are privileged to present a guest editorial from Mr. Norman Augustine.

Mr. Augustine was raised in Colorado and attended Princeton University, where he graduated with a BSE in Aeronautical Engineering, magna cum laude, and an MSE. He was elected to Phi Beta Kappa, Tau Beta Pi, and Sigma Xi.

In 1958 he joined the Douglas Aircraft Company in California where he worked as a research engineer, program manager, and chief engineer. Beginning in 1965, he served in the Office of the Secretary of Defense as assistant director of defense research and engineering. He joined LTV Missiles and Space Company in 1970, serving as vice president, advanced programs and marketing. In 1973 he returned to the government as assistant secretary of the Army and in 1975 became undersecretary of the Army, and later acting secretary of the Army. Joining Martin Marietta Corporation in 1977 as vice president of technical operations, he was elected as CEO in 1987 and chairman in 1988, having previously been president and COO. He served as president of Lockheed Martin Corporation upon the formation of that company in 1995, and became CEO later that year. He retired as chairman and CEO of Lockheed Martin in 1997, at which time he became a lecturer with the rank of professor on the faculty of Princeton University, where he served until 1999.

Mr. Augustine was chairman and principal officer of the American Red Cross for nine years, chairman of the Council of the National Academy of Engineering, president and chairman of the Association of the United States Army, chairman of the Aerospace Industries Association, and chairman of the Defense Science Board. He is a former president of the American Institute of Aeronautics and Astronautics and the Boy Scouts of America. He serves on the Board of Trustees of the National World War II Museum and is

a former member of the Board of Directors of ConocoPhillips, Black & Decker, Proctor & Gamble, and Lockheed Martin, and was a member of the Board of Trustees of Colonial Williamsburg. He is a regent of the University System of Maryland (12 institutions), trustee emeritus of Johns Hopkins, and a former member of the Board of Trustees of Princeton and MIT. He has been a member of advisory boards to the Departments of Homeland Security, Energy, Defense, Commerce, Transportation, and Health and Human Services, as well as NASA, Congress, and the White House. He was the initial chair of the congressionally-established Senior Management Review Board and the founding chair of In-Q-Tel. He was a member of the Hart/Rudman Commission on National Security, and served for 16 years on the President's Council of Advisors on Science and Technology under both Republican and Democratic presidents. He is a member of the American Philosophical Society, the National Academy of Sciences, and the Council on Foreign Relations, and is a fellow of the National Academy of Arts and Sciences and the Explorers Club.

Mr. Augustine has been presented the National Medal of Technology by the President of the United States and received the Joint Chiefs of Staff Distinguished Public Service Award. He has five times received the Department of Defense's highest civilian decoration, the Distinguished Service Medal. He is co-author of *The Defense Revolution* and *Shakespeare In Charge* and author of *Augustine's Laws* and *Augustine's Travels*. He holds 34 honorary degrees and was selected by *Who's Who in America* and the Library of Congress as one of "Fifty Great Americans" on the occasion of the fiftieth anniversary of *Who's Who*. He has traveled in 112 countries and stood on both the North and South Poles of the Earth.

He is widely regarded as one of the very best minds of our age and with a unique way of observing megatrends that shape our lives. He brings his vast experience and knowledge to bear on the current state of the pharmaceutical industry and provides a prescription to address the problem of runaway healthcare costs.

I hope that you enjoy this special contribution!

GOVIND RAO

UMBC, 1000 Hilltop Circle, Baltimore, MD 21250

doi: 10.5731/pdajpst.2015.01091

PDA Journal of Pharmaceutical Science and Technology



An Authorized User of the electronic PDA Journal of Pharmaceutical Science and Technology (the PDA Journal) is a PDA Member in good standing. Authorized Users are permitted to do the following:

- Search and view the content of the PDA Journal
- Download a single article for the individual use of an Authorized User
- Assemble and distribute links that point to the PDA Journal
- Print individual articles from the PDA Journal for the individual use of an Authorized User
- Make a reasonable number of photocopies of a printed article for the individual use of an Authorized User or for the use by or distribution to other Authorized Users

Authorized Users are not permitted to do the following:

- Except as mentioned above, allow anyone other than an Authorized User to use or access the PDA Journal
- Display or otherwise make any information from the PDA Journal available to anyone other than an Authorized User
- Post articles from the PDA Journal on Web sites, either available on the Internet or an Intranet, or in any form of online publications
- Transmit electronically, via e-mail or any other file transfer protocols, any portion of the PDA Journal
- Create a searchable archive of any portion of the PDA Journal
- Use robots or intelligent agents to access, search and/or systematically download any portion of the PDA Journal
- Sell, re-sell, rent, lease, license, sublicense, assign or otherwise transfer the use of the PDA Journal or its content
- Use or copy the PDA Journal for document delivery, fee-for-service use, or bulk reproduction or distribution of materials in any form, or any substantially similar commercial purpose
- Alter, modify, repackage or adapt any portion of the PDA Journal
- Make any edits or derivative works with respect to any portion of the PDA Journal including any text or graphics
- Delete or remove in any form or format, including on a printed article or photocopy, any copyright information or notice contained in the PDA Journal