



Girls Don't Study Science but Ladies are Pioneers on the Frontiers of Biotechnology Law: A Review of global health impacts of Nanotechnology law

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Citation: Feitshans I, Charoy D (2019) Girls Don't Study Science but Ladies are Pioneers on the Frontiers of Biotechnology Law: A Review of global health impacts of Nanotechnology law. Adv Biochem Biotechnol 7: 083. DOI: 10.29011/2574-7258.000083

Received Date: 21 February, 2019; **Accepted Date:** 11 March, 2019; **Published Date:** 19 March, 2019

Summary

This article gives an unusual glimpse of the backstory for Global Health impacts of Nanotechnology law an important book aimed at quenching the thirst for knowledge among people around the world who use nanotechnology

Global Health Impacts of Nanotechnology Law

is an eye-opening exciting book that examines the public health policy questions raised by nanotechnology and new medicines. Nanotechnology refers broadly to the manipulation of matter on the level of atoms and allows design of nanomaterials for specific functions. The impact of nanotechnology on daily materials from vaccines to computers to objects in food, healthcare, agriculture, communications and national security- is already transformative.

Will there be legal liability for the ethical and social transformations that will follow in the wake of Nano medicine and Nano enabled treatments for disease?

How will Nano medicine transform legal and cultural definitions of "Health" and disease?

And central to understanding all of these policy issues,

How can society maximize the benefits of Nanotechnology while reducing the risks?

International legal scholar Dr ilise Feitshans views the nanotechnology revolution in science as a once in a lifetime opportunity to revolutionize public health. As she sees it, antiquated patterns that caused harm will be replaced by new systems creating positive social change. Dr Feitshans is fearless in asking about the new world for end users of Nanotechnology. Drawing the big picture, for her readers, Dr Feitshans has created a fabulous new interdisciplinary approach that has an admixture of creativity, with clearthinking. An easy read and a good read that opens the

doors of intellectual curiosity to reveal a wide ranging intellectual adventure! Applying her expertise derived from graduate degrees in law, international relations and public health and experience working in legislative drafting at the local federal and international level is an adventure that she embraces with welcoming passion.

Readers will find tools to operationalize their own legislative dreams in this text. Many authors will follow with long analysis of narrow questions, but all will rely on the pioneering interdisciplinary approach that she created in order to evaluate this new field that did not exist when most people alive today were in school (including some recent graduates!) [1].

Global Health Scholar: The Backstory

The question how an author arrives at such a new part of the biotechnology legal landscape and with a fresh perspective is as intriguing as Nanotechnology itself. Therefore a few points about the changing cultural matrix for women in science and law provide important insights to the process of creating this important book. Dr Feitshans gladly offered some details to provide an historical perspective. For example, when she was a child she was told science was not for girls not by her parents but by some very potent cultural messages such as Laws and policies excluding young ladies from high end schools such as Stuyvesant High School in NY. In fact, when Ilise was in elementary school girls were not allowed to wear pants to class. One day a whole group of girls wore pants at the same time. The principal called their mothers and threatened to discipline the girls for breaking the rules. Ilise's mother bravely stated that forcing girls to wear skirts was a badge of servitude under the USA Constitution's 13th Amendment, a concept that although technically correct did not sit well with the school administration.

"I was lucky that there were so many of us that the school changed the rules a month or two later when it was too warm to want to wear pants. And we were not allowed to come to school in

pants, we had to change clothes in the girl's bathroom during class. The rules about what girls can't do had not yet changed by the time I started Barnard College at Columbia University, women were still not allowed admission to most of the all-male Ivy League colleges. From the standpoint of our gendered lives there was little cultural difference between being excluded from science programs with labs and being excluded from wearing pants".

The need to understand the inextricable link between laws governing science and laws governing society has been a driving force in her intellectual journey that enables her to describe regulatory needs for risk governance for emerging science an opportunity that did not exist before. "Dr. Ilise Levy Feitshans has understood the essence of an interdisciplinary approach to solving the kaleidoscopic problems of the world. Her work has constantly been about making the world a better place for the generations to come; a living, breathing definition of a global citizen" according to Aditi Kandlur, Junior Research Fellow School of Life Sciences Manipal Academy of Higher Education, Manipal India "She drives motivation into younger generations to be assertively curious, to demand what is right and ensure it is accomplished. Her book is one of a kind, a pioneer in what will be needed to be applied in regulations and consulted for governance. It captures a bit of the Future and its needs for the Present to see and perceive".

Among bioethicists "There is an ongoing discussion on whether there is a need for regulations harmonized at the international level or revisions of the existing legislation at the national level." According to lawyer and doctoral candidate Çağrı ZEYBEK ÜNSAL Hacettepe Üniversitesi Ankara/Türkiye "Ilise's book touches upon the key points for legislation harmonizing nanotechnology standards and bioethical concerns clearly and it provides a better understanding for why we need law. It is a very useful book for stakeholders who seek responsible development of nanotechnology and want to know about how to formulate law regarding emerging medical technologies".

Currently serving as the first-ever Fellow in International Law of Nanotechnology at the European Scientific Institute in Archamps France, she is a former international civil servant at the United Nations, Geneva, Switzerland, obtained her master of science in public health from Johns Hopkins University, Baltimore, USA, and doctorate in International Relations from Geneva

School of Diplomacy, Switzerland. She was honored among "100 Women Making a Difference in Safety, Health and Environment Professions" by the American Society of Safety Engineers in 2011 and received the Ms-JD.org Superwomen award in 2016. Her doctorate in international relations also won the best research prize in social medicine and prevention at the University of Lausanne in 2014.

Key messages for Global Health

Everyone comes into contact with Nanotechnology at some point in their life. News on the phone is made possible by gold nanoparticles that transmit information and silver nanowire circuitry in touch screens for phones and for banking and buying public transit passes. Not to mention how often people use cosmetics skin creams shaving cream and 3D printed components for new housing.

And the impact of technology as a source of social change is equally startling according to the analysis set forth in *Global Health Impacts of Nanotechnology law*. Whether changing the tasks of daily life or the shape of global governance Nanotechnology is a major player in new cultural norms. Multidisciplinary training about Nanotechnology and stakeholder engagement is therefore a key to protecting posterity regardless of the form of government that fosters the rule of law. For this reason, everyone needs to know about Nanotechnology emerging sciences and how civil society can manage these transformative technologies using the rule of law.

In conclusion *Global health impacts of Nanotechnology law* addresses the legal, social, and policy implications of nanotechnology from a global perspective, making nanoscience accessible to lay readers. Thanks to nanotechnology civil society has new ways of reaching people and making books accessible like kindle on your phone. The days of the glass ceiling are over, the sky is the limit. a Nano enabled drone will be the vehicle to take girls to science and law governing risk where no man has gone before, an amazing journey thereby making the world safer for all.

References

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