4th Global Summit on Toxicology

## Date & Venue: August 24-26, 2015 Philadelphia, USA

(Theme: Exploring the Tailored Strategies and Lucid Technologies in Toxicology and Pharmacology)

## About the Conference:

OMICS Group cordially invites all the participants across the globe to attend the 4th Global Summit on Toxicology during August 24-26, 2015 at Philadelphia, USA. Toxicology-2015 Annual Meeting features a broad range of scientific sessions and a thematic program that provides participants with a unique opportunity to deepen their knowledge in topical areas and interact with leaders in their respective disciplines.

Toxicology-2015 meeting offers an exclusive opportunity for toxicologists with diverse backgrounds, coming from various continents, to meet and to maintain network with your colleagues and leaders in your related research field. This prestigious conference will cover a broad range of topics addressing Toxicology and Applied Pharmacology, Clinical and Forensic Toxicology, Risk Assessment of Chemicals in Food, Ecosystem, Genetic Toxicology, Developmental and Reproductive Toxicology, Nanomaterials, Computational Toxicology, Antidotes and other emerging disciplines.

For more details please visit http://toxicology.global-summit.com/

## Importance & Scope:

Toxicology is the study of the adverse effects of physical, chemical and biological agents on the living system and the subsequent expression of these changes. The safety evaluation of pharma products involves evaluation for the risk that a drug can pose to animals and man with respect to normal physiological function and reproductive performance. Drug safety and efficacy testing are essential for new pharma drugs, biological, herbal and natural remedies, nutraceuticals and probiotic food products, and select cosmetics before they are introduced in the market.

International guidelines, particularly standards of toxicity testing, are changing very fast. Good laboratory practice is mandatory standard for laboratories for global acceptance of the work. With these challenges, it is important to understand the increasing scope of toxicology in drug safety evaluation.

The scientific program of Toxicology 2015 includes a plenary session, symposia, workshops, panel discussions, informational sessions, regional sessions, and poster sessions. Toxicology-2015 enhances opportunities for educational development and to exchange the knowledge in toxicology and its applications.

## Why Philadelphia?

The National Center for Toxicological Research (NCTR) is the only FDA Center located outside the Washington D.C. metropolitan area. The one-million square foot research campus in Jefferson, Arkansas plays a critical role in the missions of FDA and the Department of Health and Human Services to promote and protect public health. Regulatory science researchers, academia, and other regulatory science research organizations and groups from around the world investigate, learn, and train at the Federal facility. NCTR, FDA's internationally recognized research center, plays a critical role in FDA's mission. The unique scientific expertise of NCTR is critical in supporting FDA product centers and their regulatory roles.

The University of Pennsylvania, the largest private employer in Philadelphia, is a world-renowned leader in education, research, and innovation. This historic, Ivy League school consistently ranks among the top 10 universities in the annual U.S. News & World Report survey. Penn has 12 highly-regarded schools that provide opportunities for undergraduate, graduate and continuing education, all influenced by Penn's distinctive interdisciplinary approach to scholarship and learning. At University of the Sciences in Philadelphia, an individual can improve his/her marketability and career prospects with a master's or doctoral degree in both toxicology and pharmacology fields.

## **Conference Highlights:**

- Modes of Toxic Action
- Measurement of Toxicants and Toxicity
- Applied Toxicology
- Chemical Toxicity
- Regulatory Toxicology
- Nanomaterials
- Mechanistic and Predictive Toxicology
- Countersteps towards Toxicity

### Why to attend???

Toxicology global summit is a venue where you can share your research views and ideas in latest scientific achievements in the arena of toxicology & applied pharmacology and other related disciplines. Anticipating over 300 toxicologists from more than 25 countries in attendance, this three-day event allows everyone the opportunity to network with colleagues and leading scientists from around the world. More than 20 percent of the attendees come from countries as far away as Australia, Egypt, China, Latin America, and Africa. Toxicologists can explore lessons learned, share scientific findings, and novel approaches with other toxicologists at this annual event, which is designed to showcase the year's latest in research.

An industrial exhibition will be organized in the same room where the poster sessions, lunch and coffee breaks will be held throughout the entire congress. Attendees and exhibitors from around the globe gather to exchange ideas and debut cutting-edge products, toxicity testing services, technologies.

A Unique Opportunity for Advertisers and Sponsors at this International event:

http://toxicology.global-summit.com/sponsors.php

## Major Marketing Associations around the Globe

- Society of Toxicology, USA (SOT)
- Society of Toxicology of Canada
- Latin American Association of Toxicology (ALATOX)
- Japanese Society of Toxicology
- Italian Society of Toxicology
- German Society of Toxicology
- EUROTOX
- British Toxicology Society
- French Society of Toxicology

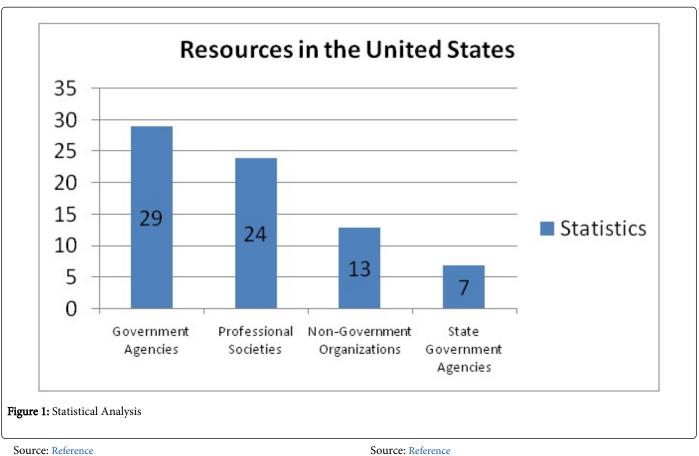
#### Major Marketing Associations in USA

- Society of Toxicology, USA (SOT)
- American Society for Cellular and Computational Toxicology
- Genetic Toxicology Association

- Royal Society of Chemistry
- Society of Environmental Toxicology and Chemistry
- Safety Pharmacology Society

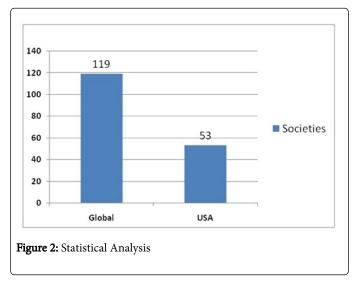
## **Major Resources in USA**

In the United States, most graduate and postgraduate toxicology training is funded by the National Institutes of Health (NIH), particularly the National Institute of Environmental Health Sciences (NIEHS), which provides training grants to universities, the Environmental Protection Agency also funds "a few students". There are an enormous number of resources relevant to toxicology and environmental health in the United States. More than 166 schools are offering Toxicology Graduate Programs. Center for Molecular Toxicology and Carcinogenesis is located in Pennsylvania State.



Source: Reference

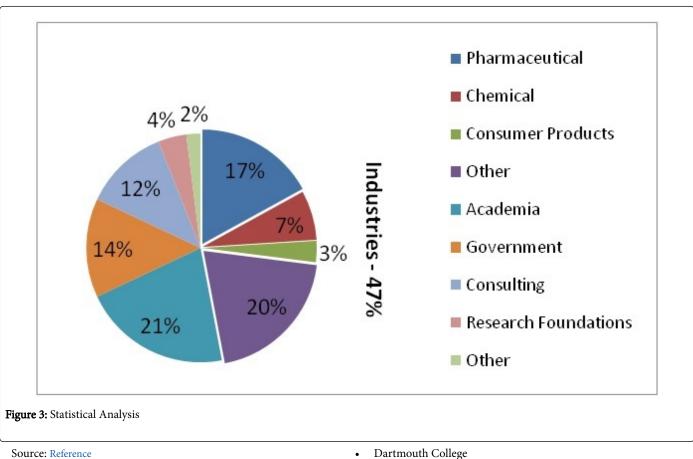
## **Statistical Analysis of Societies**



# **Target Audience:**

Toxicologists, Pharmacologists, Forensic professionals, Criminologists, Investigators, Clinicians, Researchers, Academic scientists, Industry professionals, Corporate Managers, Lab Directors and Decision makers from all corners of the Pharma, Biotech and Health Care industries across the globe.

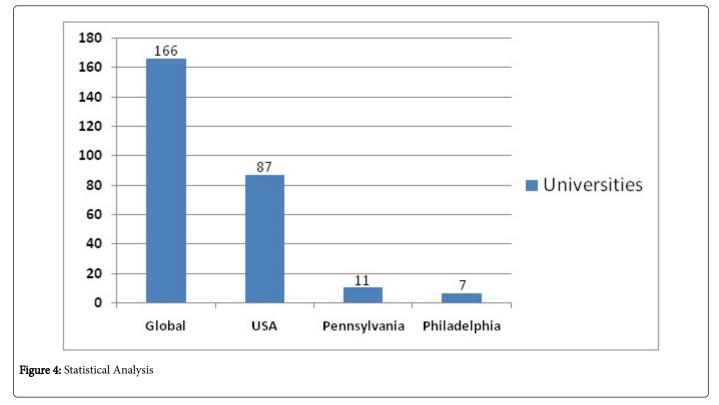
The "Survey" estimates that 9,000 toxicologists are employed in North America. Of recent PhD's, 53% entered industry, 34% found positions in academia and 12% in government.



## **Top Toxicology Schools in USA:**

- Massachusetts Institute of Technology
- University of Pennsylvania
- Yale University
- Cornell University

- Stanford University
- University of North Carolina At Chapel Hill
- University of Pittsburgh Pittsburgh Campus
- Vanderbilt University
- Johns Hopkins University



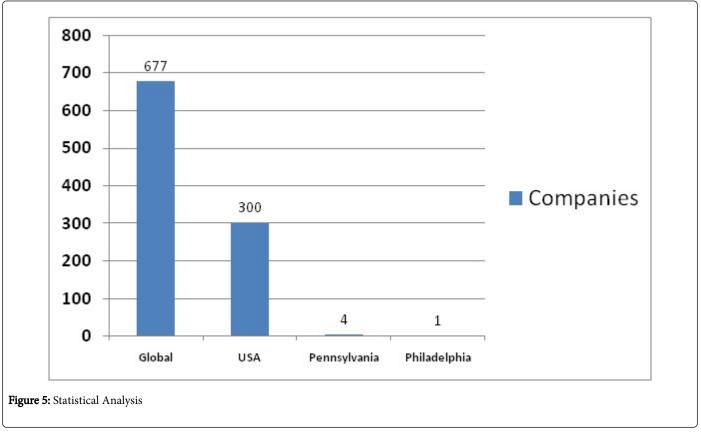
#### Source: Reference

## **Top Toxicology Companies**

- BASi Bioanalytical Systems, Inc.
- Metrics Contract Services
- BioScience Laboratories, Inc.
- Pacific BioLabs (PBL)
- ToxServices LLC.
- Myriad RBM, Inc.

- Advanced Chemistry Development (ACD/Labs)
- Avomeen Analytical Services
- Rules-Based Medicine's (RBM)
- BIOCIUS Life Sciences, Inc.'s
- The Jackson Laboratory
- Geneva Laboratories, Inc.
- Randox Toxicology

## Major Companies Associated with Toxicology



Source: Reference

## Market Analysis of Toxicology:

The Toxicology global market is segmented by industry, technology, method, application and geography. Based on industry, the market is further segmented into diagnostics, pharmaceuticals, chemicals, cosmetics, and food. Pharmaceutical industry secured the largest market share whereas cosmetics industry was the fastest growing industry than the rest. The inclination towards detection of toxicity during earlier stages of development is propelling the growth of pharmaceutical industry. Also, the support of regulatory authorities to use in vitro and in silico methods in place of animal testing for gathering toxicological information is driving the cosmetic industry. Based on technology, the market is segmented into cell culture, high throughput screening, cellular imaging, and omics technologies. Cell culture technology that occupies the largest market share will also register maximum growth rate. The evolution and advancement is leading to introduction of new technologies that can better predict toxicity levels and translate in vitro results into significant in vivo effects.

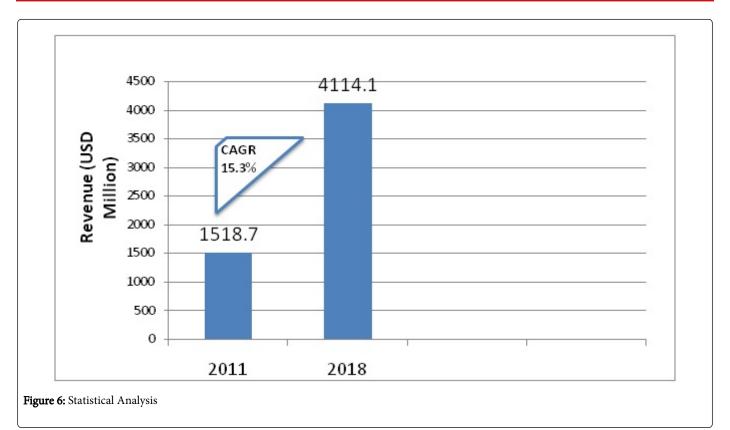
In-vitro toxicology testing market forecast to surpass revenues of US \$17Bn by 2018.

The in-vitro toxicology testing market represents a highly fragmented market although the most dominant players operating in this sector include

- Agilent Technologies (U.S.)
- Alere, Inc. (U.S.)
- Bio-Rad (U.S.)
- BioReliance (Sigma Aldrich) (U.S.)
- Catalent Pharma Solutions (U.S.)
- Charles River Laboratories (U.S.)
- Covance (U.S.)
- Cyprotex (U.K.)
- Eurofins Scientific, Inc. (U.S.)
- GE Healthcare (U.K.)
- Life Technologies Corporation (Thermo Fisher Scientific) (U.S.)
- Quest Diagnostics (U.S.)

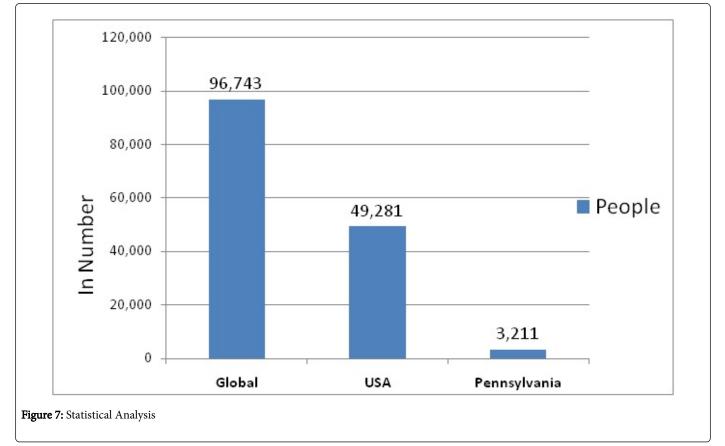
# Global In Vitro Toxicity Market Estimates and Forecast, 2011-2018 (USD Million)





Source: Reference

Number of people working on Toxicology:



## **References:**

- 1. http://toxipedia.org/display/wlt/United+States
- 2. https://www.toxicology.org/ai/si/sites.asp#Trade
- 3. http://www.iutox.org/members.asp

4. http://www.toxicology.org/AI/CRAD/careerguide.asp

5. http://www.gradschools.com/search-programs/toxicology

 http://www.environmental-expert.com/companies/keywordtoxicology-455 7. http://www.transparencymarketresearch.com/in-vitro-toxicity-testingmarket.html