

Developing a Global Clinical Trial Network

Anthony VA Nguyen Dong-A University Hospital's Regional Clinical Trial Center





•What is research?

- •How is the drug development industry changing?
- •Why should I get involved?
- •How is the Dong-A University Hospital Clinical Trial Center adapting to the change?





<u>Research</u>

<u>Martyn Shuttleworth</u> - "In the broadest sense of the word, the definition of research includes any gathering of data, information and facts for the advancement of knowledge."

<u>Creswell</u> "Research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue". It consists of three steps: Pose a question, collect data to answer the question, and present an answer to the question.

<u>Merriam-Webster Online Dictionary</u> "a studious inquiry or examination; especially : investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws".



The future of drug development



	2008		2009		2010		2011	
1	USA	65,752	USA	62,289	USA	53,525	USA	35,133
2	France	14,218	France	9,419	Germany	11,291	Germany	8,391
3	Germany	9,489	Germany	8,995	France	11,189	France	5,874
4	Canada	4,897	Canada	4,087	Japan	7,349	Japan	4,934
5	Japan	4,464	Spain	3,524	Canada	4,772	Italy	2,789
6	Italy	4,047	Italy	3,239	Spain	3,622	Canada	2,793
7	Spain	3,633	UK	3,236	Italy	3,476	Spain	2,594
8	UK	3,379	Japan	3,187	UK	2,963	UK	2,020
9	Russian Federation	2,142	Belgium	2,897	Korea	2,221	China	1,704
10	Poland	2,024	Poland	2,276	Poland	2,156	Korea	1,503
11	Belgium	1,995	Russian Federation	2,116	Russian Federation	2,153	Belgium	1,169
12	Netherlands	1,733	Korea	1,341	Belgium	2,094	Poland	1,077
13	Korea	1,664	Australia	1,647	China	1,946	Russian Federation	1,074
14	India	1,662	China	1,636	Czech Republic	1,879	Brazil	1,008
15	China	1,642	India	1,563	India	1,698	Netherlands	932
16	Australia	1,615	Netherlands	1,321	Australia	1,647	Australia	803
17	Czech Republic	1,563	Brazil	1,321	Brazil	1,464	Hungary	795
18	Brazil	1,480	Hungary	1,129	Netherlands	1,352	Czech Republic	782
19	Sweden	1,186	Israel	1,070	Romania	1,322	Israel	764

PHARMACEUTICAL INDUSTRY RECENT TRENDS AND CHALLENGES

\$1.1 TRILLION BY 2014. WORLDWIDE PHARMACEUTICAL SALES ARE EXPECTED TO INCREASE AT A COMPOUND ANNUAL GROWTH RATE OF 5–8%. FUELING THESE GAINS ARE PROJECTED DOUBLE-DIGIT GROWTH RATES IN EMERGING ECONOMIES.

THE CHALLENGES

EXPIRING PATENTS



AS PRODUCTS COME OFF PATENT PROTECTION, MANY LARGE FIRMS ARE AT RISK OF REVENUE REDUCTION OF UP TO 30–40%.

GROWTH OF GENERICS

THE US GENERICS MARKET IS ANTICIPATED TO GROW 10% ANNUALLY DURING 2010–2013, FUELED BY THE PRESSURE TO REDUCE COSTS IN HEALTHCARE, THE EXPIRATION OF PATENTS AND THE ESTABLISHMENT OF AN APPROVAL PATHWAY FOR BIOSIMILARS.

DRUG RECALLS

1309% IN 2009

CONCERNS OVER SAFETY AND SUPPLY CHAIN QUALITY HAVE SURGED.

THE OPPORTUNITIES

HEALTHCARE REFORM 32 MILLION

ADDITIONAL PEOPLE WILL HAVE HEALTH INSURANCE AND ACCESS TO PRESCRIPTION DRUGS UNDER THE NEW HEALTH PLAN.

OUTSOURCING, COLLABORATIVE PARTNERSHIPS AND STRATEGIC ALLIANCES WITHIN THE INDUSTRY ARE FORGING NEW BUSINESS MODELS.

THE 65+ SEGMENT OF THE POPULATION WILL NEARLY DOUBLE BETWEEN 2010 AND 2030. ON AVERAGE, THOSE OVER 65 YEARS OLD TAKE BETWEEN 5 TO 6 PRESCRIPTION MEDICINES.

Progressive pharmaceutical companies are realizing that in order to respond to these pressures and command a competitive position in the marketplace, they must take a new approach to their overall workforce strategy, finding new strategies for accessing and deploying critical talent where and when they need it.



Sources: Business Monitor International (BMI) Q42010; Census.gov; CNN.com; Fda.gov; IMS Health; Yahoo! Finance



Why and how should you get involved?





INTERESTS ALTRUISM REPUTATION GROWTH STABILITY VALUE QUALITY OF LIFE SUPPLY AND DEMAND COMPLIANCE SECURITY FAME





www.worldlifeexpectancy.com South Korea

		Deaths	%
1	Stroke	38,497	17.19
2	Coronary Heart Disease	20,496	9.15
3	Lung Cancers	16,437	7.34
4	Diabetes Mellitus	13,766	6.15
5	Stomach Cancer	12,794	5.71
6	Liver Cancer	11,797	5.27
7	Suicide	11,408	5.10
8	Road Traffic Accidents	7,570	3.38
9	Colon-Rectum Cancers	7,562	3.38
10	Liver Disease	7,408	3.31



www.worldlifeexpectancy.com

		Deaths	%
1	Coronary Heart Disease	445,864	21.42
2	Alzheimers/Dementia	172,765	8.30
3	Lung Cancers	165,402	7.95
4	Stroke	146,664	7.05
5	Lung Disease	130,808	6.29
6	Diabetes Mellitus	75,280	3.62
7	Colon-Rectum Cancers	62,592	3.01
8	Hypertension	62,156	2.99
9	Influenza & Pneumonia	57,722	2.77
10	Kidney Disease	50,889	2.45

Global Leaders

BUSINESS AND PROJECT ACCELERATION TEAM



Singapore Malaysia Australia USA Japan Taiwan Hong Kong Germany



Forward thinking

REACTA Editing services



Our Vision

"

Education is the most powerful weapon which you can use to change the world.

Nelson Mandela



Informed Community

Internships

To go beyond our limits!

