Considering a Career in the Pharmaceutical / Biotech Industry

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Advantages of a Career in the Pharmaceutical Industry

* Work on the cutting edge of science and clinical medicine with the newest potential medications.

* Plenty of resources to support the projects with no need to write grants.

* Able to attend any scientific or medical meeting worldwide if it is useful for the project.

* Make personal contacts with key academic researchers and top doctors and scientists globally.

* Exercise creativity in strategic planning, study design, data analysis, report writing, oral and written presentations.

* Can still interact with basic science colleagues as well as clinical colleagues.

* Work with high quality colleagues: smart, verbal and interesting people with a wide range of backgrounds.

* Good salary and benefits without wrangling with insurance companies or billing systems.

* Although there are important project deadlines and busy periods, there is usually no difficulty taking time off for holidays and vacations.

* Time available to read journals and texts, and stay up on the latest in science and medicine.

* Can still engage in teaching activities within one's project teams or in the company. * Easy to move from one company to another – ample opportunity for a change of scene if desired.

Disadvantages of a Career in the Pharmaceutical Industry

* Little or no direct patient contact (unless one sets up a local clinical activity). * Usually one no longer publishes as a first author or a key author, or gives major presentations at scientific meetings – the goal is not to enhance one's own prestige as a leader in medicine, but instead is the success of the project.

* Not directly part of a university – usually no academic appointment, with little opportunity for teaching medical students, residents or fellows.

* Must take care about confidential and proprietary information.

* Some people harbor negative views of the pharma industry, and may change the way they think about you.

Choosing a Medical Role in a Company

Types of Medical Roles

Clinical Development Medical Affairs Pharmacovigilance Basic Research

Size of Company

Large, multinational corporation Medium, national or multinational corporation Small with only one or two marketed products Start-up with no marketed products; has compound in late-stage development Early start-up with no products; no compounds in late-stage development

Type of Drug

Small molecule, biotech, lab test, medical device, related or not related to endocrinology

<u>Company Location</u> Country, state, big or smaller city

Choosing a Medical Role in a Company

Clinical Development

"Invent new drugs and get them registered with governments in various countries – emphasis on FDA and EMA"

Work with an experienced team of bright and committed people, both people inside the company and external experts

Communication skills, word processing, local meetings, analytical skills, solving puzzles, data analysis, oral presentations, publish results, 10% travel time

Phase 1, 2 and 3 clinical study design, data analysis, and report writing Medical Affairs

"Interact with prescribers, disease experts, scientific and patient organizations regarding adoption and use of approved drugs"

Review marketing materials, help train sales teams, grants programs, investigator-sponsored studies, Phase 4 studies, physician advisory boards, travel to meet doctors, 20% travel time. Sales can speak "on-label," Med Affairs may answer "off-label" questions.

Choosing a Medical Role in a Company Pharmacovigilance

"Be an expert on a specific drug or drugs regarding adverse events, how to assess and formally report safety events or trends."

Safety questions during design of Phase 1, 2, 3, 4 and investigatorsponsored studies, data analysis, evaluation of and regulatory reporting of safety events including post-marketing assessments and reporting. Much of the work is routine with well-defined steps and procedures. Mostly internal roles with little travel.

Basic Research

"Conduct bench scientific research using laboratory equipment, assays, animals."

Provide hands-on expertise in the lab, provide medical relevance as you work with PhD colleagues in a research program. Sometimes publish, but publications often occur years after experiments done. 5% travel.

General Career Advice

Know yourself (this takes time and effort)

Have goals in you life, even if general, and think about them every day

Seek a life-partner who shares many of your core values

Guard your health -- you are in this for the long run

Be open to chance events

Work hard, and do the best you can at whatever you are doing at the moment

Money is VERY important, not as an END, but as a TOOL

Avoid rash career changes, but after a time, be ready to make a change to better align your work with your goals. Be courageous, and use your resources to make a change that appears to be right.

For more information about choosing a career, and finding one's way into academia and / or into an industry career...



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