



CAREERS IN CLINICAL RESEARCH AND THE BIOPHARMACEUTICAL INDUSTRY

Eligibility:

- **Life Sciences Graduates**
- **Computer Sciences Graduates**
- **Databases Specialists**
- **Engineering Graduates**
- **Marketing and Management Graduates**
- **MD-s, RN-s and Medical Professionals**

International Biopharmaceutical Association

www.ibpassociation.org

About International Biopharmaceutical Association

The International Biopharmaceutical Association brings together institutions and organizations from different countries. Its services are available to organizations, institutions and authorities concerned with biopharmaceutical industry, as well as to individual specialists, administrators, researchers, educators and students. Any professional or science graduate may become a member of the Association. As a member, you will receive high recognition from potential employers and increase your chances of becoming employed when you indicate your IBPA membership on your resume. You will receive monthly newsletters containing job listings, industry updates and information on new innovations and current trends, and will be eligible for grants and tuition fee subsidies. You will also receive up to 50% discounts on annual conferences and other association events and will be eligible to submit your articles and scientific works to be published in IBPA scientific and industry publications.

The following memberships are available: **Junior Membership.** Title: "Membrum Integrum" Junior membership is available for new science graduates seeking to join the industry. It is free for one year. **Full Membership. Title: "Membrum Absolutum"** Full membership is available for biopharmaceutical professionals. **Honor membership. Title: "Membrum Honoratum"** Honor Membership is a free lifetime membership for distinguished scientists and professionals within the biopharmaceutical industry. **Institutional Membership:** Membership in the IBPA provides excellent benefits for biopharmaceutical companies, CRO-s and clinical investigators.

For more information and on-line applications please visit:
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Introduction

The information in this brochure is provided to assist you in making an informed decision when choosing a career in clinical trials and the biopharmaceutical industry in general.

Not many people are aware of the fact that before each drug makes it to the pharmacy shelf, it has to pass a lengthy approval process in which many clinical research professionals are required. Not many people are aware of the fact that you need not be an expert in pharmaceuticals to become a part of this very lucrative industry. This industry is primarily concerned with regulations and rules that are easy to learn (no matter what scientific background you have). When you know these rules and regulations, you are very attractive to any industry employer.

The International Conference on Harmonization (ICH) of Technical Requirements for Registration of Pharmaceuticals for Human Use is a unique set of international regulations that brings together the regulatory authorities of Europe, Japan, Canada and the United States.

The purpose of these regulations is to make recommendations on ways to achieve greater harmonization in the interpretation and application of technical guidelines and requirements for product registration in order to reduce or obviate the need to duplicate testing carried out during the research and development of new medicines. The objective of such harmonization is a more economical use of human, animal and material resources, and the elimination of unnecessary delay in the global development and availability of new medicines whilst maintaining safeguards on quality, safety and efficacy, and regulatory obligations to protect public health.

Good Clinical Practice (GCP) is an international ethical and scientific quality standard for designing, conducting, recording, and reporting trials that involve human subjects. Compliance with GCP assures that the rights, safety, and well-being of trial subjects are protected and that the clinical trial data are credible.

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This International Conference on Harmonisation (ICH) guidance provides a unified standard for the European Union, Japan, the United States and other countries to facilitate the mutual acceptance of clinical data by the regulatory authorities in those jurisdictions.

Compliance with this standard provides public assurance that the rights, safety and well-being of trial subjects are protected, consistent with the principles that have their origin in the Declaration of Helsinki, and that the clinical trial data are credible.

The U.S. and Canadian systems of new drug approvals are perhaps the most rigorous in the world. On average, it costs a company \$359 million to get one new medicine from the laboratory to the pharmacist's shelf, according to report by the Congressional Office of Technology Assessment. It takes an average of 12 years for an experimental drug to travel from lab to medicine cabinet.

As you may know, the major pharmaceutical companies generate their revenues from a few key brand name products. When the patents expire on these products, other pharmaceutical companies may produce a generic drug based on the "brand-name drug" which will inevitably lead to a loss of profits.

In the next few years, many key patents will expire and major pharmaceutical companies (i.e. Pfizer, Eli Lilly, Merck, Apotex, GlaxoSmithKline etc.) will be looking to bring new pharmaceutical products off the laboratory bench and onto the pharmacy shelves.

This major boom in new pharmaceutical products will occur within the next two years. In order to accommodate this, the pharmaceutical industry is going to transition from pre-clinical research and development (R & D) to large-scale clinical trial work. As such, the industry will witness a sky rocketing demand for CRPs (Clinical Research Professionals)! In depth industry analyses shows that unless serious measures are taken

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the Clinical Trial Sector will face major lack of professionals in the next several months.

You need to have the right educational background to enter this lucrative industry. A life science degree (especially pharmacology, pharmacy, biochemistry, biology, immunology, physiology, or toxicology) or a nursing degree is one of the requirements to become a clinical research professional. A computer or IT degree will be an asset to start career as a clinical data manager. Chemistry, engineering are suitable backgrounds for Quality Assurance. Commerce, marketing and business management are suitable backgrounds for a marketing and management career. Other science degrees may be accepted. Licensed physicians may start career as clinical investigators.

Another hurdle neophytes must overcome is “practical experience”. All CRP job descriptions, list “one or two years experience” as a minimum requirement.” Many, otherwise qualified candidates, often find themselves in a typical Catch-22 situation: You need experience to get hired yet how do you acquire the prerequisite experience without being hired?

Through extensive research and collaboration with hundreds of sponsors, investigational sites, and CROs, the IBPA recommends training programs that provide both industry specific knowledge and skills and practical clinical trial experience. These programs are designed to provide training in ICH GCP, Good Laboratory Practice, Good Manufacturing Practice guidelines, clinical trial monitoring, investigative site coordination, knowledge and understanding of Food and Drug Administration (FDA) and Therapeutic Products Directorate (TPD) regulations. Most importantly, these programs provide practical, real world, clinical trial experience through the internship programs.

Equipped with years of experience in creating and providing training, these training institutions developed an understanding that the only qualified instructors are individuals employed in the industry. To this end they take a very serious approach to

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choosing the most qualified industry professionals to lead our training programs.

The combination of quality and accessibility of these training programs lead to their outstanding reputation in the industry and make them the corporate trainer of choice for several leading international pharmaceutical companies and government agencies.

Why the biopharmaceutical industry is a great field to work in?

According to “Vault Career Guide to Biotech” despite the downturn in stock price valuations since the spring of 2000, the outlook for the future of biotech is more hopeful than gloomy.

From a demographic perspective, of the 281 million people in the US population today, approximately 62 million constitute the 45-to-64 year old age group - the Baby Boom generation. While the U.S. population is expected to increase 8 percent between 2001 and 2010, this cohort will expand by 26 percent over the same period and is by far the fastest growing segment of the overall population. In addition, with life expectancy in 1999 at 76.7 years and showing a steady positive trend, aging Baby Boomers are creating a rapidly growing market for aging related disease treatments based on biotechnology.

According to the Census Bureau, the over-65 year old population is expected to more than double between 2001 and 2030, which will represent 13 percent to over 21 percent of the overall population. Since senior citizens now account for approximately 33 percent of pharmaceutical consumption, their growing numbers can only bode well for the prospective demand for the industry's products.

Thus, by focusing its research on the four leading causes of death in the US and Canada - heart disease, cancer, cerebrovascular disease, and chronic lower respiratory disease -

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the biotech industry is set to bring to market biopharmaceuticals for which there is an expanding base of demand.

A new field, bioinformatics, stands out as particularly promising in managing and interpreting the masses of data generated by genomic and proteomic research. Bioinformatics refers to the use of advanced databases and computer analysis tools to perform queries and simulations, cross-reference and compare data, archive test results, and collaborate. This new field has spawned academic programs and is one of the promising new career paths created by the industry.

List of Sample Positions within the Biopharmaceutical Industry

Bioanalytical Positions	Business Development	Genomics
Product Manager	Quality Control	Research Scientist
Bioinformatics	Clinical Data\Archives	Manager\Director Positions
Project Manager	Regulatory Affairs	Sales
Biostatistician	Clinical Research Associate	Marketing\PR
Proteomics	Research Associate	Technician, Skilled Trades etc
Medical Writing	Technologist	Patents\IP Positions
Clinical Research Coordinator	Technology Transfer	Clinical Research Investigator

Testing of Experimental Drugs in Humans

Before a medication can be sold over the counter or with a prescription, it must undergo rigorous testing. The process by which new medications are tested so they can ultimately be marketed to treat various diseases is as follows:

Pre-clinical phase includes:

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Development of a Compound

Chemists in a laboratory develop compounds with a certain chemical structure that the scientists believe may function in humans to alleviate certain symptoms in a disease, or perhaps even cure it.

Pre-clinical Testing

To prove that the compound works as is hypothesized (assumed) and does not produce any negative side effects, it is first thoroughly tested in animals (i.e., mice, rats, dogs and monkeys). This stage of testing is commonly referred to as the "pre-clinical" stage. The purpose of these animal studies is to prove that the drug is not carcinogenic (causes cancer), mutagenic (causes mutations), or teratogenic (causes malformations), and to understand how the drug is absorbed and excreted. Once a pharmaceutical company proves that the compound appears to be safe, and possibly effective in animals, the company will provide this information to FDA in the United States or TPD in Canada and request approval to begin testing the compound (experimental drug) in humans via an Investigational New Drug (IND) application.

Clinical Trials/Studies in Humans

The clinical testing (investigation) of experimental drugs (previously unproven in humans and therefore "experimental") in humans is normally done in three phases (Phase I, II and III) with more and more people included in each subsequent phase. Before moving to the next phase of development the data are carefully analyzed to ensure the experimental drug is at least safe and well tolerated. After successful completion of Phase I-III testing, a company will submit the results of all of the studies to the FDA or TPD to obtain a New Drug Approval (NDA). Once the FDA or TPD grants a company with a NDA, the company can market the drug (medication) to the public.

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Additional testing (post-marketing or late phase III/phase IV) to look at the ongoing-term safety continues.

Careers in Clinical Research

As we already mentioned in the introduction you need to have the right educational background to enter this industry. A life science degree (especially pharmacology, pharmacy, biochemistry, biology, immunology, physiology, or toxicology) or a nursing degree is one of the requirements to become a clinical research professional. A computer or IT degree will be an asset to start career as a clinical data manager. Chemistry, engineering are suitable backgrounds for Quality Assurance. Commerce, marketing and business management are suitable backgrounds for a marketing and management career. Other science degrees may be accepted. A licensed physician may start a career as a clinical investigator.

Clinical Research Associate Job Description

A Clinical Research Associate (CRA) is a professional who monitors the administration and progress of a clinical trial (pharmaceuticals, biologics, or devices) on behalf of a sponsor. A clinical trial is a scientific study of the effects, risks and benefits of a medicinal product, including new drug substances and currently marketed drugs. A CRA might also be called a clinical research (or trials) monitor, executive, scientist or coordinator, depending on the company.

Typical work activities include: locating and briefing suitable doctors/consultants (or investigators) to conduct the trial; setting up the study centers - ensuring each center has the trial materials and checking that the investigator knows exactly what has to be done; monitoring the trial throughout its duration which involves visiting the study centers on a regular basis to check the patient data in the case report forms (CRFs) and to sort out any problems which may arise; validating and collecting completed CRFs from hospitals and general

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practices; closing down study centers on completion of the trial; discussing results with the statistician. Writing technical reports on the trial is usually carried out by a medical statistician.

The job of a CRA can vary tremendously from company to company. In some companies, you would be involved in the whole process - from sitting down with the doctor who has the idea for a trial, and actually working out a protocol, to writing up reports after the analysis has been done. In other companies it would be the medical adviser who initiated the trial and you could just be involved in collecting data once the trial has been set up.

Salaries vary quite widely from company to company. A car is generally provided and bonuses may be paid. Working conditions vary between companies. You will need to work extra hours regularly, although weekend or shift work is uncommon. Generally, a limited amount of time is spent in the office. The work is mainly on the road visiting trial centers, general practitioners (GPs) or hospitals; dealing with doctors and research nurses. The work requires a fairly smart dress code. In some companies, CRA's operate from home, only visiting the office for briefing meetings, training, etc. For the majority of the time CRA's work alone. Self-employment or freelance work is sometimes possible and some contract companies employ CRA's on a freelance basis or part-time. There are 70-80% women in the profession and career advancements are possible.

Entry Requirements: The relevant degree subject area is life and medical science. A life science degree (especially pharmacology, pharmacy, biochemistry, immunology, physiology or toxicology) or a nursing degree is one of the requirements for entry into CRA work. Other science degrees may be accepted. It is, however, relatively unusual for a graduate with no relevant prior experience to go straight into CRA work, although some companies will employ recent graduates with the necessary personal skills. As a graduate with no previous relevant experience you would be more likely to

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enter the field at a lower level, e.g. as a clinical data coordinator. These are generally jobs that deal with the data handling/co-ordination part of the CRA's job without the involvement of initiating and designing the trials. Experience in this type of work would generally qualify you to move on to a CRA position.

Professional Training. The Clinical Research Professional Development Program is a program designed to provide a focused course of study for individuals seeking to prepare themselves for clinical research in the pharmaceutical trials industry as a clinical research associate or a clinical research coordinator. For more details please visit www.kriger.com .

Sources of Vacancies. See specialist press for recruitment agencies or contact career services at your academic institution. It may be worth registering with specialist recruitment agencies. Alternatively (or in addition) try approaching pharmaceutical or CRO companies directly. You can also submit your resume for evaluation and career placement to www.biorole.com .

Clinical Data Manager Job Description

Clinical research data management, medical coding and analysis positions deal with data collected from clinical trials (pharmaceuticals, biologics, or devices) on behalf of a sponsor. A clinical trial is a scientific study of the effects, risks and benefits of a medicinal product including new drug substances and currently marketed drugs. Data processing and analysis is a very important part of every clinical trial.

Typical work activities include: maintaining the accuracy, integrity and security of a complex, large computerized records system; applying knowledge of regulations, policies, protocols and/or procedures to control and maintain accurate records; dealing with a large volume of information which may require the need to be screened, grouped, summarized, transcribed,

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coded etc.; solving operational/data problems in consultation with other employees and/or supervisors; maintaining confidentiality of data as required; preparing a variety of standard status and statistical reports. General clerical/secretarial duties include data entry, collating library searches and other related tasks.

The job of a Data Management Assistant, Data Coordinator, Clinical Data Analyst and Medical Coding Specialist can vary tremendously from company to company. In some companies you would be involved in the whole process of data management and analysis. In other companies the tasks would be more specific.

Jobs are found in different locations. As a clinical data associate you will have an opportunity to watch a new drug move through the research process. Clinical data associates provide high-quality deliverables to sponsors and other internal Strategic Business Units to ensure continued success and growth of the department and company. You will review and process clinical trial data to ensure the accuracy and consistency of the clinical databases. This will involve the following data-related activities: CRF tracking, reviewing, validation, updating and safety coding.

Entry Requirements: The relevant requirements include a Bachelor's degree in computer science, mathematic, statistics, or database specialist, or life and medical science. Previous data entry experience and intermediate level skills in using the following computer programs, Oracle, SAS, MS Power Point, MS Word, MS Access required. A statistics or database specialist degree, degrees in computer science or other IT degrees or life science degrees (especially pharmacology, pharmacy, biochemistry, immunology, physiology or toxicology) or a nursing degree is one of the requirements for entry into clinical research data management work. Other science degrees may be accepted. Some companies will employ recent graduates with necessary personal skills. As a graduate with no previous relevant experience you would be more likely

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to enter the field at a lower level, e.g. as a clinical data coordinator. These are generally jobs that deal with data handling/co-ordination without the involvement of initiating and designing the trials. Experience in this type of work would generally qualify you to move on to other research positions. You must be able to understand the importance of good clinical practice (GCP). Having relevant pre-entry experience is desirable and could include: statistical work or data management, a medical practice, a nursing background, medical sales, clinical laboratory work, clinical data work or pharmaceutical research.

Typical Employers: You would either be employed directly by a pharmaceutical company or by a contract research organization (CRO - agencies which employ clinical research staff to contract out to pharmaceutical companies). Hospital academic departments occasionally have the same positions.

Professional Training. Clinical Data Management Professional Development Program is a program designed to provide a focused course of study for individuals seeking to work in clinical research data management in the pharmaceutical trials industry. For more details please visit www.kriger.com.

Sources of Vacancies. See specialist press for recruitment agencies or contact career services at your academic institution. It may be worth registering with specialist recruitment agencies. Alternatively (or in addition) try approaching pharmaceutical or CRO companies directly. You can also submit your resume for evaluation and career placement to www.biorole.com.

Quality Assurance Job Description

The traditional definitions of Quality Assurance are appropriate for the biotechnology industry. The standard systems and methodologies become the core for the function. The role of Quality Assurance Specialist in the biotechnology industry is complicated by the process methodology and the need to define the product by the process. The systems and the

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support activities are the key elements to this definition. The validation of all aspects of the process becomes the Quality Assurance of the material. The means for determining the safety, efficacy, purity, and stability of the end material are related to this process definition.

Typical work activities include: ensure timely completion of routine QA procedures, manufacturing, packaging and Formulation Development in-process testing checks, sampling and other agreed upon duties and / or ensure implementing of good laboratory (GLP), good clinical practices (GCP) or good manufacturing practices (GMP) (emphasis depends on employer's requirements and type of employer), ensure timely inspection, sign in and reconciliation of production rooms, equipment, raw materials and packaging components, report any non-conformances that are identified during routine operations monitoring and in-process testing in a timely manner to QA Supervisor and provide assistance in the Quality Notification investigation, ensure that of all phases of manufacturing, packaging and Formulation Development comply with relevant SOPs (Standard Operations Procedures), cGMPs (Good Manufacturing Practices) and safety guidelines, participate as a member of the Quality Assurance Dept., to develop, implement and conduct in-process quality inspections through the manufacturing and packaging facilities, assist in the development and execution of inspection systems that will track and report on production compliance metrics.

Working conditions vary between companies. You will need to work extra hours sometimes, although weekend or shift work is uncommon.

Entry Requirements: knowledge of GLP, GCP, GMPs is a must. Excellent organizational and interpersonal skills. Prior experience in the pharmaceutical industry is preferred. Computer literacy - general word processor/database software. Excellent verbal and written communication skills. Good interpersonal skills/team player. Ability to assess and identify GMP and quality-related issues. Strong attention to detail.

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Demonstrated time management skills and the ability to work toward deadlines is required.

Experience/familiarity with Therapeutic Product Directorate (TPD) and Food and Drug Administration (FDA) regulatory requirements.

Academic degree, preferably in engineering, chemistry, biochemistry, computer sciences pharmaceutical, biology, biomedical science, Business Administration.

Because of the ever-tightening government regulations on the manufacturing drugs, the need for QA specialists is increasing.

Professional Training. The Quality Assurance Professional Development Program is a program designed to provide a focused course of study for individuals seeking to work in quality assurance in the pharmaceutical trials industry. For more details please visit www.kriger.com .

Sources of Vacancies. See specialist press for recruitment agencies or contact career services at your academic institution. It may be worth registering with specialist recruitment agencies. Alternatively (or in addition) try approaching pharmaceutical or CRO companies directly. You can also submit your resume for evaluation and career placement to www.biorole.com .

Management and Marketing Jobs Description

Drug development is not a simple process. Drug development is more comprehensible if the team member has the good fortune to join a project team at its inception rather than, as is often the case, as a replacement team member.

Health care provided in most countries has experienced significant change in recent years. Probably the greatest change to be faced in the future will be the expectation that new medicines will be not only safe and effective, but will also be cost effective in the overall context of disease management.

The role of management and marketing is essential in achieving these objectives.

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Project Manager Functions in a clinical trials project might include: Clarification of requirements with the client, project planning, evaluation of risks, reporting of key stages to top management Evaluation of patient numbers, data quality, GCP standards in Study Centers IRB-s / EC (centers covered and time scales) Protocol approval, regulatory approval, appointment of CRA-s/ External suppliers: CRF printing, CRO-s, investigative drugs manufacturing, bulk, placebo manufacturing, drug packaging, central laboratory, contract biometrics / Estimated of budgets and overall time scales. Rigorous monitoring is required until project completion.

Salaries vary quite widely from company to company. A car is generally provided and bonuses may be paid.

Jobs are found in restricted locations. Some work is localized (company laboratory) and some are regionally based.

Entry Requirements: knowledge of GLP, GCP, GMPs is a must. Excellent organizational and interpersonal skills. Prior experience in the pharmaceutical industry is preferred. Computer literacy - general word processor/database software. Excellent verbal and written communication skills. Good interpersonal skills/team player.

Experience/familiarity with Therapeutic Product Directorate (TPD) and Food and Drug Administration (FDA) regulatory requirements.

Academic degree preferably in Business Administration, Commerce or Economic.

Typical employers - you would either be employed directly by pharmaceutical companies or by contract research organizations (CRO - agencies which employ clinical research staff to contract out to pharmaceutical companies). Hospital academic departments occasionally employ CMM's

Professional training: Management and Marketing Professional Development Program is a program designed is intended to give both general and specific information and guidelines to help manage pharmaceutical projects in a biopharmaceutical research, development and manufacturing

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environment. This program is designed to provide a focused course of study for individuals seeking to position themselves in the pharmaceutical and biotechnological industry as project managers and marketing specialists . It will also provide knowledge and skills in Good Laboratory, Clinical and Manufacturing Practices. This program provides a comprehensive overview of the roles/responsibilities of both the pharmaceutical project manager and the marketing specialist in the pharmaceutical industry. This program was created to provide you with the key aspects, differences, challenges, job criteria and demands, and industry expectations in this field. Course content will focus on key concepts and information essential to effectively function in the pharmaceutical / biotechnological industrial arena. For more details please visit www.kriger.com .

Sources of Vacancies. See specialist press for recruitment agencies or contact careers services at your academic institution. It may be worth registering with specialist recruitment agencies. Alternatively (or in addition) try approaching pharmaceutical or CRO companies directly. You can also submit your resume for evaluation and career placement to www.biorole.com .

Clinical Investigator Career

First of all, a clinical investigator must be a physician with a license to practice medicine in the country where he or she wishes to act as a clinical investigator. One of the reasons that most people become physicians is that they love to learn. Probably one of the most exciting times in the life of a physician is during medical school when he or she is continually gaining new knowledge and being exposed to new technology. But even in medical school, when you devote 100% of your time to learning, it is impossible to keep up with the remarkable expansion in medical science. However, since few of us have the luxury of remaining a student our entire career,

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most of us become increasingly obsolete from the very day we leave our training programs.

If you want to remain close to medical science and to the development of new drugs and devices that correspond to the way you practice, then clinical research may be both emotionally and intellectually satisfying.

As a physician who conducts clinical research, you will be providing your patients with additional treatment options. This can be vitally important for people with life-threatening or chronic diseases. It also can be of major importance to those individuals who simply have not found appropriate medical solutions to more mundane illnesses. For example, patients often cannot tolerate the current best therapy because of idiosyncratic reactions, side effects or allergies. The ability to offer all these individuals something new and potentially effective is a significant accomplishment. So, in a very real sense, a physician engaged in clinical research is providing his or her patient with the opportunity for improved medical care.

Professional Training: The Clinical Investigators Professional Development Program is a program designed to provide a focused course of study for licensed physicians seeking to work as clinical research investigators. This program provides you with a full set of Standard Operating Procedures (SOP's) for your site, thus saving you a lot of time and money. For more details please visit www.kriger.com .

Internships and Practical Experience

There are several institutions offering internship opportunities. One of them is Kriger Research Group International, a well-known contract research organization and provider of professional development programs. You can participate and gain unique experience in the following Clinical Trial Projects:

PROJECT I: Efficacy of the lowering effect of PROLIPOSTAT® on Blood concentrations of low-density

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lipoprotein cholesterol (LDL-C) in patients with normal and elevated blood concentrations of LDL-C

PROJECT II: Phase II Study the Efficacy of the healing effect of recombinant human epidermal growth factor on diabetic foot ulcers

PROJECT III: Phase I Study the safety and Dose determination of Immuno - Stimulatory Therapy Agent for Bladder cancer, melanoma and colon cancer.

PROJECT IV: Survey: Proper Use and Cost Reduction strategies for prescription and non-prescription drugs

Upon completion of your work, you will receive a reference letter stating your new experience and qualifications with this contract research center.

Professional Training Scholarship Programs

P.V.N.H. (Promotion and Value of National Health) Scholarship Programs is a part of IBPA activity and are offered to students who wish to pursue a career in the biopharmaceutical field. PVNH will consider any applicant who has the right educational background to take part in a professional development program, but is unable to do so due to financial difficulties. We encourage applications from all serious candidates. Every application will be given full consideration. Your exact scholarship amount will be determined based on your educational background, tuition fees and your financial situation. For more information please contact www.pvninfo.com

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Volunteering with IBPA

IBPA is currently seeking qualified candidates to fill various volunteer positions. We have several requests from other organizations in the industry worldwide seeking volunteers and we also have various internal positions to fill.

Please visit our web-based database in order to submit your resume to our database.

http://www.ibpassociation.org/volunteer_database.htm

IBPA Publications

The IBPA newsletters deliver up to date information on upcoming events in the biopharmaceutical industry around the world. Most members of the association will appreciate the value of networking within this industry as a means for advancing one's career. In addition, the newsletter also lists several attractive positions available from our partners and other reputable companies around the globe. If you are currently seeking a new position in the industry, we encourage you to apply for suitable positions listed in the newsletters that are in your area. The International Biopharmaceutical Association is also very pleased to announce that we will be launching two new, peer reviewed, journal titles: "The Proceedings of the International Biopharmaceutical Association" and "BioAuditor" in 2005. The IBPA hopes that these publications will serve the Biopharmaceutical community by providing a forum for researchers to publish current, non-confidential, research items, to stimulate open and frank discussion, and to promote scientific discovery and research in the Biopharmaceutical industry. The journals are currently slated to run quarterly issues both as an e-journal and in print.

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Submission of Industry Related Article to International Biopharmaceutical Association Publications and/or other Industry Publications

We are pleased to offer a volunteer position with the IBPA (International Biopharmaceutical Association). We feel that your work with our organization would be mutually beneficial, and could also accredit your experience in the biopharmaceutical industry.

You may be assigned to write an article for: International Biopharmaceutical Association Newsletter.

You should select the topic from the following list (name of the author beside the topic means that the article has been already written) :

http://www.ibpassociation.org/ibpa_unpublished_articles.htm

Authors (Volunteers) have to submit request to write the article to Ms. Kristin Hudasek, IBPA Coordinator at info@ibpassociation.org

You can also propose your own title not included in this list. Please attach your resume or mention your affiliation with the industry.

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Our Sponsors: CRO-s, Training Providers, Recruiters

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Recruiters

BioRole Scientific Solutions Inc.

(888) 520-6673

info@biorole.com

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Contract Research & Development Organizations

ClinQua Clinical Trials Inc. USA

<http://www.clinqua.com/>

4370 La Jolla Village Drive

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Tel / Fax: (858) 225-3997

E-mail: info@clinqua.com

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