



The American Statistical Association

San Francisco Bay Area Chapter

Since 1928

March 1997

Joint Biostatistics and General Applications Program

"Pharmacodynamic Analysis of Analgesic Clinical Trials: Statistical Solution"

Jun Liu

*Department of Statistics
Stanford University
Stanford, CA 94305*

Abstract

The biotechnology revolution stems from rapid advances in the biological sciences. One important product of these advances is a large and rapidly growing data base of biopolymer (DNA, RNA, and protein) sequences. Much attention of researchers in many different fields has been attracted, and numerous techniques for the analysis of these sequences have been generated. The great majority of these techniques have been designed to analyze a single sequence or for the comparison of a pair of sequences. Multiple sequence analysis has remained a difficult challenge. In recent years, statistical models have advanced one important problem in multiple sequence analysis, e.g., multiple sequence alignment. Here we describe several such models with Markovian structures and discuss their relationships and applications. Models for the detection of subtle relationships among DNA or protein sequences are illustrated with examples.

Date: Thursday, March 13, 1997

Time: 3:30 - 4:00 PM Refreshments
4:00 - 5:00 PM Discussion

Place: Failure Analysis Associates, Room 3100
149 Commonwealth Dr., Menlo Park CA 94025

Dinner for the speaker will follow at 6 PM

Directions: From the Peninsula, Failure Analysis Associates may be reached via the Marsh Road (east) exit off Rte. 101 in Menlo Park. From the East Bay, use either the Bay or San Mateo Bridge to get to 101 south, or use the Dumbarton Bridge to Bayfront Expressway and exit Bayfront at Chrysler Dr. Refer to enclosed map.

OPEN POSITIONS:

M.S. Biostatistician

Environmental Risk Analysis, San Mateo

Environmental Risk Analysis, Inc. is a new and rapidly growing scientific consulting firm that offers services in biostatistics, statistics, epidemiology and environmental risk analysis. Our clients are Fortune 500 companies and law firms. The position is located at our San Mateo office. We are seeking an individual with a Masters degree in Biostatistics or Statistics with courses or experience in environmental epidemiology.

Responsibilities of the position include:

- Performing statistical analyses using statistical software packages, primarily SAS;
- Performing critical reviews of health and medical literature related to epidemiology and environmental health;
- Assisting in conducting quantitative health risk and statistical analyses;
- Writing computer code to perform specialized statistical analyses (SAS Macros, FORTRAN, S-Plus).

The ideal candidate will have course work or experience in linear models, categorical data analysis, survival analysis, epidemiologic methods, survey sampling, multivariate analysis and occupational and environmental health and epidemiology. Experience with IBM compatible PCs and using SAS on PCs is required. Experience with one programming language (FORTRAN, S-Plus) is desired. Good oral and written communication skills are necessary.

For confidential consideration please send a resume to:

PRESIDENT
Kathleen Lamborn
(415) 476-8863

lambornk@neuro.ucsf.edu

PRESIDENT-ELECT
Michael Lock
(408) 954-2583

Michael_Lock@bdis.com

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ying_lu@rad-mac1.ucsf.edu

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(415) 742-0131
jim@sfasa.org

SECRETARY
Ann Kalinowski
(415) 688-7203
sfamk@fail.com

William Butler, Ph.D.
Environmental Risk Analysis, Inc.
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San Mateo, CA 94402-2512
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William Butler, Ph.D.
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1670 Amphlett Blvd., Suite #115
San Mateo, CA 94402-2512
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- Assist with time and cost modifications on assigned projects and estimates on proposals.
- Perform other duties as assigned by management.

Qualifications

Education

B.S. or equivalent in computer science or related field.

Experience

Required

- Minimum 5 years.
- Expert understanding of SAS.
- Minimum 5 years of complex SAS programming experience.

Preferred

- Thorough understanding of Besselaar Statistical Programming procedures.
- Two years' programming experience at Corning Besselaar.

Special Skills

Required

- Excellent written and oral communication skills.
- Good understanding of overall clinical research development process.
- Project management or system development experience is beneficial.
- Interact with Project Core Team Members.
- Assign and monitor work of the programming team working on assigned projects.
- Client contact on project specific and technical issues.
- Overtime required occasionally.
- Attend client meetings to discuss project related issues.
- Possible travel for client meetings.
- Flexibility to modify plans and resources to meet Project Team and client goals.
- Ability to plan and organize work of a programming team.
- Ability to make decisions to accomplish team goals.

Ph.D. Biostatistician

Environmental Risk Analysis, San Mateo

Environmental Risk Analysis, Inc. is a new and rapidly growing scientific consulting firm that offers services in biostatistics, statistics, epidemiology and environmental risk analysis. Our clients are Fortune 500 companies and law firms. The position is located at our San Mateo office. We are seeking an individual with a Doctorate degree in Biostatistics or Statistics with 3+ years of experience including quantitative health risk analysis.

Responsibilities of the position include:

- Performing critical reviews of health and medical literature related to epidemiology and environmental health;
- Communication (written and oral) of findings and conclusions to team members, clients and health professionals;
- Performing and supervising statistical analyses of health and environmental data sets using statistical software packages, primarily SAS and SUDAAN;
- Assist in conducting quantitative health risk and statistical analyses.

The ideal candidate will have experience and/or course work in occupational and environmental epidemiology, quantitative risk assessment, research design; and statistical methods including linear models, categorical data analysis, survival analysis, survey sampling and multivariate analysis. Demonstrated ability to communicate technical information is required as is experience with IBM compatible PCs and SAS. Experience with one programming language (FORTRAN, S-Plus) is desired.

For confidential consideration please send a resume to:

Master's Level Statistician

Financial Proformas, Inc.

Walnut Creek

Master's level professional statistician, ideally with experience in building credit scoring models, to serve as a deputy statistician in a multi-year project for a Bay Area financial analysis software and credit training company. Please send information to:

Financial Proformas, Inc.
1350 Treat Boulevard
Suite 400
Walnut Creek, California 94596
Attention: Rex Beach

Sr. Statistical Programmer Analyst

Corning Besselaar

Key Responsibilities

- Perform as a key resource in a technical area or in project management
- Analyze and improve departmental processes
- Perform as a key SAS programmer for development and projection projects.
- Review and interpret Report and Analysis Plans for assigned projects.
- Lead programming efforts for (CA)NDS/(CA)PLA preparation.
- Review draft and final production runs for any project.
- Complete assigned tasks in an accurate and timely manner, while following Statistical Programming Standard Operating Procedures.
- Assist with interviewing potential candidates.

If you are interested, please submit your resume to:

Human Resources Manager
Corning Besselaar, Inc.
200 Pringle Ave., Ste. 555
Walnut Creek, CA 94596
Fax: (510)974-3703

Senior Project Statistician
Corning Besselaar
Walnut Creek
Key Responsibilities

- Serve as core project team member to coordinate and manage all statistical activities on a project and provide statistical liaison with client.
- May serve as project director.
- Provide statistical input for protocol and CRF development.
- Prepare RAPs (detailed specifications for the format and content of clinical trial reports, including table of contents, description of study design, definition of efficacy and safety variables, data handling conventions, methods of statistical analysis, programming rules, mock-ups for tables and listings).
- Provide direction to programmers and data associates during production and review of computer generated tables and listings for CTR.
- Review computer-generated tables to verify accuracy.
- Prepare key portions of integrated clinical/statistical report, including sections related to data handling and statistical methodology, patient accountability, baseline compatibility and efficacy results.
- Prepare key sections of the ISS and ISE, including those related to data handling and statistical methodology, patient accountability, baseline compatibility and efficacy results.
- Perform other duties as assigned by management.

Qualifications
Educational
Required
M.S. in Statistics
Preferred
Ph.D. in Statistics
Experience
Required
Minimum 2 years as Statistician
Preferred

Minimum 3 years as Statistician in Pharmaceutical Setting.

Special Skills

- Good written and oral communications skills.
- Computer proficiency in Word Processing and SAS programming.

If you are interested, please submit your resume to:

Human Resources Manager
Corning Besselaar, Inc.
200 Pringle Ave., Ste. 555
Walnut Creek, CA 94596
Fax: (510)974-3703

Senior Data Associate
Corning Besselaar
Walnut Creek
Key Responsibilities

- Key project team member with responsibility for maintenance of clinical database
- Data Associate's responsibilities, plus the following:
 - Develop time and cost estimates
 - Participate in proposal activities and client presentations.
 - Participate in development of Case Report Forms.
 - Mentor, train and supervise staff performing data management and data entry.
 - Manage data clean-up process.
 - Perform other duties as assigned by management.

Qualifications
Educational
Required
BA/BS
Experience
Required
Minimum 4 years increasing responsibility in data management of clinical trials.

Special Skills
Required

- Computer literacy.
- Good verbal and oral communication skills.
- Ability to work independently
- Time Management.
- Ability to supervise staff.

If you are interested, please submit your resume to:

Human Resources Manager
Corning Besselaar, Inc.
200 Pringle Ave., Ste. 555
Walnut Creek, CA 94596
Fax: (510)974-3703

Statistical Programmer
Corning Besselaar
Walnut Creek
Key Responsibilities

- Modify, validate, and implement project work in SAS primarily utilizing existing code.
- Supervision is expected.
- Assemble and validate production table runs.
- Modify and maintain existing programs and writing new SAS code to produce diagnostics for data review.
- Modify and maintain programs and writing simple SAS code with programming team support to produce data listings, summary tables, and graphs as specified in the Report and Analysis Plans.
- Create programs for routine data transfers.

- Assist with programming for tables for DSMB review and periodic interim analyses.
- Completing assigned tasks in an accurate and timely manner, while following Statistical Programming Standard Operating Procedures.
- Perform other duties as assigned by management.

Qualifications

Educational

Required

A.A.S.

Preferred

B.S. preferred in computer science or related field.

Special Skills

Required

- Good programming skills.
- Basic understanding of Base SAS
- Ability to make use of and modify existing SAS code.
- Interact with other programmers and Statistical Programming project managers.
- Discuss requests with statisticians, project associates, and data associates.
- Overtime required occasionally.
- Ability to communicate effectively verbally.
- Ability to follow directions.
- Ability and desire to quickly learn new job-related information and to increase independence.
- Willing to modify plans and behavior when necessary to meet a goal.
- Ability to shift priorities according to project tasks and requirements.

Preferred

- Exposure to SAS/STAT and macro language.

If you are interested, please submit your resume to:

Human Resources Manager

Corning Besselaar, Inc.

200 Pringle Ave., Ste. 555

Walnut Creek, CA 94596

Fax: (510)974-3703

Biostatistician

SEQUUS

Menlo Park

SEQUUS Pharmaceuticals, Inc. is a leader in the development, manufacture, and commercialization of liposomal drugs and lipid-based biopharmaceutical products primarily to treat cancer and infectious diseases. Proud to be among the 2 percent of biotech companies formed in the last 20 years with approved products on the U.S. market, we are building our talented team for further success.

The successful candidate should have a Ph.D. or M.S. in Biostatistics or Statistics with substantial experience in protocol development, analysis, conduct of multi-center clinical trials (experience in cancer clinical trials is a plus), and experience in NDA submissions. Knowledge of FDA regulations and regulatory submission process is required. Excellent communication, organizational, planning and documentation skills are essential. Broad knowledge of statistical methods for the analysis of clinical trials (Phase I through IV) is required.

To achieve SEQUUS's mission of improving patients' lives, we are building teams and empowering the best talent in our industry, providing a productive professional environment, and rewarding performance linked to the achievement of goals. Please send your resume to:

SEQUUS Pharmaceuticals, Inc.

Professional Staffing

960 Hamilton Court

Menlo Park, CA 94025

fax (415)453-3124.

We promote a diverse workforce/EOE.

Statistician

Bank of America

San Francisco

Bank of America is seeking statisticians for its retail banking marketing group in San Francisco. You will be responsible for the

development and implementation of statistical models to improve sales and marketing programs in retail banking. The statistical models you will develop will predict attrition, product and response propensity to specific products and promotions using current customer data.

The ideal candidate will have a MS in Statistics plus at least 2 years related business experience. Expert with SAS and experience using large data sets. SQL a plus. Strong project management and communication skills are essential.

E-mail your resume to:

Henry.Bennett@Bankamerica.com

or mail your resume to:

Henry Bennett

San Francisco Recruiting Resources
#13608

SFASA-HB8444

P.O. Box 37000

San Francisco, CA 94137.

Senior Statistician

Financial Proformas Inc.

Walnut Creek

Financial Proformas Inc. was founded in 1981 and currently has a full-time employed staff of approximately 70. FPI is the market leader in providing P.C. and server based software work tools to commercial bank lenders to assist them in evaluating and processing commercial loan transactions. The Company's principal software products are installed in more than 50 of the top 100 banks in the U.S. and a total of more than 2000 institutions world-wide. Staffed by bankers, financial specialists, software development professionals and training experts, FPI uses proven expertise in applying the science of computing technology and credit management to the art of risk assessment and management of the commercial lending process. FPI sells its software products and

education services directly to its user-clients through a network of full-time sales people resident throughout the U.S. as well as in Canada, Australia, and the U.K. FPI is available in English, French Canadian, Spanish Danish, German and Dutch. Credit educational materials are available using U.S., Canadian, Australian, and U.K. terminologies and formats.

The Senior Statistician will assume immediate managerial responsibility for a body of on-going developmental work in building and testing large scale computer based models which provide predictive outcome estimates based on large samples (60,000) of commercial loan and related financial data. The end product of the work can be viewed as the commercial loan equivalent of consumer loan credit scoring technology. Clients of the Company will use the results of this work to improve their ability to assess individual, and consequently, loan portfolio risk levels, shifts in those levels and as an input to adjusting loan policy.

Success in this position requires substantial knowledge and proven skills in a wide range of disciplines, including

- Demonstrated successes in building/utilizing statistical models to predict likely outcomes.
- Knowledge of commercial financial analysis; experience in commercial loan processing systems would be a significant plus

Ph.D. or MA degrees in mathematics, statistics, or operations research.

If you have interest, please Fax your resume and any other pertinent information to:

Paul Erickson
Strategic Consulting Services
Fax:(415)435-0376.

Senior Programmer Analyst SEQUUS Menlo Park, CA

You'll serve as lead programmer responsible for the coordination, planning and programming of tasks. As a technical resource for the department, you will be provided with consultation on special project programs. You'll also assist in the specification, development, implementation and maintenance of software systems to expedite the performance of analysis and reporting tasks. Other responsibilities will include developing, redefining and documenting procedures, as well as assisting training analysts. We require a BS or MS in statistics, mathematics or a related field with 4-7 years' clinical applications programming experience. You must demonstrate excellent SAS skills and strong knowledge of UNIX operating systems. A knowledge of SPlus, multiple hardware platforms and a variety of software packages is desirable.

SEQUUS Pharmaceuticals, Inc. is a leader in the development, manufacture, and commercialization of liposomal drugs and lipid-based biopharmaceutical products primarily to treat cancer and infectious diseases. Interested candidates may send resume to:

SEQUUS Pharmaceuticals, Inc.
Professional Staffing
960 Hamilton Court,
Menlo Park, CA 94025
fax 415/463-3124.

We promote a diverse workforce/EOE.

Senior Biostatistician SEQUUS

Menlo Park, CA

The successful candidate should have a PhD in Biostatistics or Statistics with substantial experience in protocol development, analysis, conduct

of multi-center clinical trials (experience in cancer clinical trials is a plus), and experience in NDA submissions.

Knowledge of FDA regulations and regulatory submission process is required. Excellent communication, organizational, planning and documentation skills are essential. Broad knowledge of statistical methods for the analysis of clinical trials (Phase I through IV) is required.

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960 Hamilton Court
Menlo Park, CA 94025
fax 415/463-3124.

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Strategic Planning Analyst Leading Healthcare Provider Fresno

As a member of our top-rated Fresno healthcare team, you will contribute to our strategic planning efforts, including supporting service line, corporate and other market research and business planning efforts, as well as ensuring reliable reporting, synthesis and analysis of case mix data, primary and secondary market research studies, and various other purchase information sources.

Qualifications: Must be analytical, yet innovative with proven marketing and statistical analysis skills and the following:

- Bachelor's degree in Business, Marketing, IS or related area
- 2 years' strategic planning or comparable experience, ideally in a healthcare setting

- Strong verbal and written communication skills and a results-oriented attitude are musts.
- High-level computer skills and programming knowledge, specifically with HBO case mix, dBase, SPSS, Atlas, GIS, Focus, Microsoft Word, Excel and PowerPoint.

We offer a competitive salaries and benefits package. To apply, mail detailed cover letter with resume to:

Terry Foushee,
Human Resources
Saint Agnes Medical Center,
PO Box 27590
Fresno, CA 93729-7590
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Biostatistician/Statistician Pharmaceutical Company Bay Area

A major biopharmaceutical company engaged in the development of therapeutics, vaccines, diagnostics and ophthalmic products has a position for a biostatistician/statistician in the San Francisco Bay Area.

You would be responsible for

- providing statistical support for the company's diagnostic probe products
- insuring the statistical rational for products transferred to manufacturing.
- designing and interpreting experimental data
- developing trending of all in-process testing.
- evaluating and implementing cGMP compliance procedures to improve manufacturing performance of products
- designing experimental studies to troubleshoot product failures
- writing the statistical section of all validation plans.

You would report to the Technical Operations Manager.

Requirements are a BS/MS in Biostatistics/Statistics and/or related field and five or more years of related industry experience. Experience should include statistical support in manufacturing and quality control with a regulatory environment. Some knowledge of GMPs/GLPs related to FDA requirements is preferred but not required. Experience using SAS or other related software.

Starting salary will be very competitive and will be based on experience level. Will be eligible for bonuses and stock options. Comprehensive benefits will be provided, including relocation assistance.

Contact:

Romeo-Hudgins Assoc.
Executive Search Consultants
200 Lake Drive East, Ste. 206
Cherry Hill, NJ 08002
Phone (609)-482-7840, fax (609)486-0387.

Statistical Programmer Analyst III or Senior Statistical Programmer Analyst

West Coast Location

Candidate should have extensive experience in the data management, analysis, file preparation and statistical presentation (tables and graphs) with respect to the statistical analysis of clinical trial data. He/she should have experience working very closely with biostatisticians as well as information systems, clinical, medical, and regulatory personnel.

The candidate should have the demonstrated ability to independently research current and emerging technologies that can impact and improve the design, conduct, analysis, and presentation of clinical trial data. The candidate should be able to critically evaluate, communicate, and recommend suggested approaches to achieve the above objectives.

Examples of current technology might include remote data entry, computer assisted regulatory filings, intranet and Internet technology.

Experience:

B.A./B.S. in statistics, applied statistics, biostatistics, mathematics, biology or related fields. 5-9 years experience using SAS in a biomedical or other health related field is required with 1-3 years of full time SAS programming experience in biotech/biopharmaceutics field.

Contact: Ann Floyd
The Chase Group, Inc.
Phone (913)663-3100 Ext. 129
Fax (913)663-3131
e-mail:anna@chasegroup.com

Knowledge Discovery Engineer (Statistician)

Various Locations

In this position candidates will be responsible for the implementation and technical success of installed datamining/knowledge discovery accounts, providing on-site knowledge discovery services for Global 1000 companies as part of complex project plans and identify customer problems and translate them into new discovery opportunities. Qualified candidates will be proficient with artificial intelligence/pattern recognition techniques, knowledge of relational databases, SQL, ODBC, Visual Basic/C++ and other GUI tools as well as proficient with UNIX and PC/Windows or Macintosh. Must have a BA/BS or equivalent with 5+ years of experience in the computer industry, 3+ years of experience with a large scale data mining/knowledge discovery/pattern recognition project as an implementor. Project management experience is a plus. Some travel required. Positions are available in many major U.S. metropolitan areas as well as Northwest Arkansas and Central Illinois.

For more information you may send your resume or a short e-mail

message describing your relevant experience to lehman@neovista.com. Or for this position, contact directly:

J.T. Lehman

Neo Vista Solutions, Inc.

10710 N. Tantau Avenue

Cupertino, CA 95014

Phone:

direct (408)343-4201

main (408)777-2929

fax (408)777-2930

Conference Announcement

Biopharmaceutical Contract Manufacturing

Accelerating Time to Market Through Innovative Outsourcing Initiatives

American Business Symposiums is hosting a "biopharmaceutical contract Manufacturing" conference on May 6 & 7, 1997 in Cambridge, MA at the

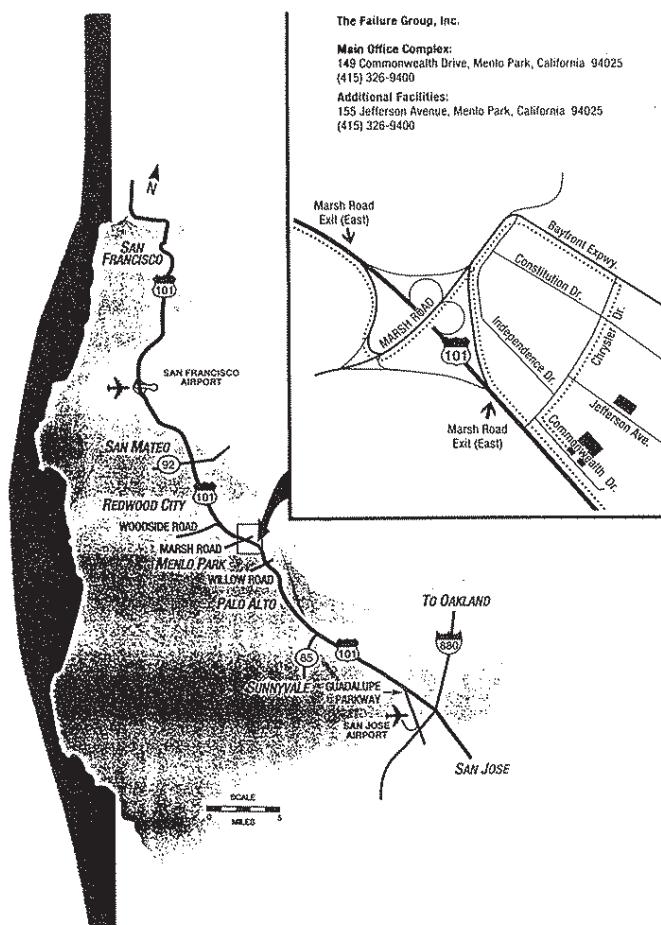
Charles Hotel.

The emphasis of the conference will be practical solutions and "how to" approaches in setting up, incorporating, utilizing and maximizing the benefits afforded by an outsourced manufacturing agreement. With several case studies by real world users, this conference is designed to enable both client and customer to leave with the tools for developing competitive plans to secure and maintain a competitive

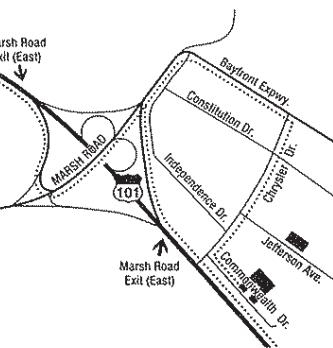
advantage in the field of biopharmaceutical development and manufacturing.

Punctuating the practical thrust of the conference will be presentations covering "best practices," "relationship building," "successfully identifying a contract manufacturer to meet your goals," "global outsourcing opportunities," "maintaining control and quality when outsourcing," and "managing multiple products at multiple sites."

To register or request a conference brochure please call Chris White, Conference Director, at American Business Symposiums, (617)736-0800.



The Failure Group, Inc.
Main Office Complex:
149 Commonwealth Drive, Menlo Park, California 94025
(415) 326-9400
Additional Facilities:
155 Jefferson Avenue, Menlo Park, California 94025
(415) 326-9400



Newsletter Submissions

The chapter newsletter runs employment ads free of charge as a service to its subscribers. Other advertisements are placed in the newsletter for a nominal charge to cover the additional copying and postage costs.

Other submissions (anecdotes, public seminar notices, jokes, etc.) are also placed free of charge. Any contributions are welcome. Send them to Ann Kalinowski, Failure Analysis Associates, 149 Commonwealth Dr., Menlo Park, CA 94025.

Phone: (415) 688-7203, fax: (415) 238-2988, e-mail: sfamk@fail.com.

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QUALITY
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Let us help you find the perfect fit.

“ Chastain always provides consulting support that is expert, professional, and efficient . . . their service is exemplary. ”

— Biotech Company Manager

“ Chastain matches me with companies where I can use my consulting expertise to the fullest . . . and gives me the support I need to do my best work. ”

— Chastain Consultant

What is the perfect fit? To the company manager, it is finding the right consultant; to the consultant, it is finding the right company. To us, finding the perfect fit is the bottom line.

Why are we so successful at making perfect fits? Because we know the biotech/pharmaceutical industries from the inside . . . as professionals, consultants, and managers. Led by founder Dr. Robert Chastain, our professionals have a wide experience in these industries . . . we know the people, the technologies, and the products.

If your work involves clinical data management, statistical analysis, or statistical programming . . . if you are a manager seeking professional expertise with exceptional service . . . if you are an expert consultant who wants the best support in the industry . . . you should call Chastain Research Group . . . today.

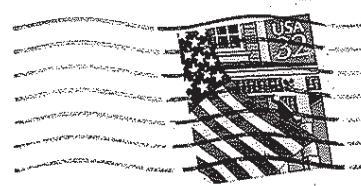


CHASTAIN
RESEARCH
GROUP

CHASTAIN RESEARCH GROUP, INC. □ 2220 Homestead Court, Suite 109, Los Altos, CA 94024 □ (408) 245-2024



San Francisco Bay Area Chapter
American Statistical Association
149 Commonwealth Drive
Menlo Park CA 94025



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SYNTEX RESEARCH

2401

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