2015-2016 Doctoral Openings

Full Time
Position: Modeling & Simulation Engineer
Requisition number: RND00003117

The successful candidate is expected to lead the development of mathematical models which are required to develop innovative new products, processes, materials, and improve innovation productivity. The successful candidate will be able to develop model libraries for a multi-disciplinary enterprise wide systems modeling environment. A detailed knowledge of differential algebraic equation (DAE) technologies, mathematical optimization, and stochastic methods are required.

Job Responsibilities:
The individual must be able to work with a team to define the model requirements.
The individual must be able to define and implement the model methods required to meet the problem requirements.
The individual must be able to implement these equations in an equation oriented simulation environment, including verification, and predict the impact of uncertainty on model predictions.
The individual must be able to exploit the model using mathematical optimization type techniques to design products and the experimental campaigns require to estimate model parameters.
**Full Time**

Position: Scientist - Engineering

Requisition number: RND00003118

The position involves developing custom methods and models to determine the relationship between specific ingredient and formulas to various aspects of product performance e.g. rheological behavior, product stability, and various custom performance measures. We seek candidates who have multi-scale modeling experience where specific chemistry models are linked to continuum level physical model constructs. Toward this we seek to apply several molecular modeling methods such as solubility, self-assembling materials, molecular properties e.g. reactivity and spectral properties, and structure-function relationships.

**Job Responsibilities:**

Capability development - custom data analysis methods, embellishments of explicit molecular modeling methods such as force field refinements

Product application modeling - development and deployment of models applied to product applications

External research management - develop and manage external academic and contract research relationships

Training - development of junior personnel in the use and application of modeling tools
**Full Time**

Position: Human Safety Toxicologist

Requisition number: RND00003111

Procter & Gamble's Global Product Stewardship organization has an immediate entry level position for a PhD level scientist in the areas of Human Safety/Toxicology and Physiologically Based Pharmacokinetic (PBPK) Modelling. The successful candidate will provide human safety support for current marketed products and upstream technologies, concentrating on how safety reassurance can be provided for use of consumer products. This work will occur in a technically challenging and globally diverse business environment.

**Job Responsibilities:**
Provide technical guidance and safety assurance to global project teams through all stages of product development.
Design, execute, and interpret in vitro and clinical safety data to ensure consumer safety of globally marketed products
Develop collaborative relationships with diverse functions including Global Safety Surveillance, Regulatory & External Relations
Apply specific technical expertise in PBPK relative to business needs across all consumer product categories.
Full Time
Position: Product Vigilance Manager
Requisition number: RND00003107

Consumer safety and global compliance are of the utmost importance to Procter & Gamble and we need the best healthcare professionals to act as stewards in these critical areas and to work to continuously improve our products.

We have a position for a Product Vigilance Manager within our Global Safety Surveillance & Analysis organisation based at our Mason Business Center, north of Cincinnati, Ohio. As a Product Vigilance Manager it is your responsibility to manage, monitor and understand in-market product safety for P&G products sold worldwide in order to i) ensure consumer safety and regulatory compliance, ii) enhance existing systems and improve current work processes for safety surveillance and iii) analyze health related consumer complaints for signal detection and continual product improvement. You will be the subject matter expert within Global Safety Surveillance & Analysis with respect to the in-market safety profile, symptom profile and special issues for your assigned product categories. You will obtain a good understanding of relevant regulations and will ensure that all regulatory submissions are processed in accordance with applicable regulations and requirements. You will be the product vigilance single point of contact for other P&G functions. You will be responsible for signal detection and signal management activities associated with your assigned product categories.

Qualifications and skills required are as follows:
1. An advanced degree in either a health care profession (e.g. Pharm. D., M.D.) or life science (PhD).
2. Good collaboration skills and experience in establishing and maintaining working relationships.
3. Excellent written and oral communication skills in English with an emphasis on communication of human health relevance, safety and clinical information. Experience with external communications to regulatory authorities and industry groups would be beneficial but is not essential.
4. Excellent organization skills, an attention to detail and an ability to manage complex systems.
5. Experience with databases, data reporting tools and statistical analysis would be beneficial but is not essential.

Previous experience in pharmacovigilance or product vigilance is preferred. The role reports to the North America Safety Surveillance Section Head who is also based at Mason Business Center. Overall you will be part of the 50+ strong Global Safety Surveillance & Analysis function. There is always plenty of help, support, coaching and training available from colleagues, with formal training being tailored to your needs and interests.
Full Time
Position: Environmental Toxicologist
Requisition number: RND00003083

Collaborate with external experts and stakeholders to promote the acceptance of scientifically robust test methods and environmental risk assessment methodologies. We are seeking Scientist-level candidate in environmental toxicology to work in the Environmental Stewardship and Sustainability organization at Procter & Gamble’s Mason Business Center. The ideal candidate should have the following qualifications.

• Ph.D. in environmental toxicology (with or without a post-doctoral experience) or closely related field with in-depth knowledge and laboratory experience in stress responses of species in aquatic, sediment and/or terrestrial environments. Experience in laboratory culture of organisms is highly desirable as the focus for the position is on whole organism ecotoxicology.
• Working knowledge in allied fields such as ecology, environmental analytical chemistry, and environmental statistics is beneficial.
• Leadership experience in leveraging environmental toxicology expertise for complex environmental risk assessment of chemicals in an industrial and/or academic setting.
• Strong communication and partnership skills to enable seamless collaboration with customers and stakeholders inside and outside the Company.

P&G provides exciting opportunities to leverage environmental expertise to guide technology innovations to deliver challenging environmental stewardship and sustainability goals. Opportunities for engagement in research in both laboratory and field settings exist and can be tailored to reflect the successful candidate’s interests and qualifications.

Job Responsibilities:
Partner with internal experts and customers to design holistic environmental risk assessment programs to support the safety of key technologies.
Design and manage scientifically robust ecotoxicology lab test programs.
Collaborate with external experts and stakeholders to promote the acceptance of scientifically robust test methods and environmental risk assessment methodologies.
Procter & Gamble’s Bioinformatics team is a group of computational biologists – scientists who employ the power of computer-based analytical techniques to explore biological datasets to help our R&D organization: 1) develop fundamental understanding of biology related to our business interests, 2) define mechanisms of action needed to provide consumer benefits, 3) identify specific molecules that can deliver these benefits, 4) prepare patent applications to protect intellectual property associated with novel approaches developed to do this work, and 5) support the “credentialing” of this science with external stakeholders (e.g., thought leaders; science editors; consumers of our products).

Computational biology/bioinformatics has become a critical component of life science-based discovery work. Increasingly sophisticated experimental techniques and a concurrent reduction in the costs to use them have resulted in generation of huge amounts of data from individual experiments (the “big data” problem widely recognized by the lay public in broader terms). Such techniques include whole genome sequencing, chip-based gene expression profiling, next-generation RNASeq-based characterization of differential gene expression, metagenomic sequencing of entire microbial communities, etc. One experiment can yield literally millions of datapoints. It would be truly impossible to analyze and interpret these data in a meaningful time frame using traditional, line-by-line methods. Computational biology is, thus, critical to the success of these technologically advanced approaches.

An effective computational biologist will possess a unique hybrid skill set, having: a) a strong background in high-level mathematics (to generate algorithms needed to mine these datasets), b) advanced computer science skills (to encode these algorithms in computational code needed to run the analyses), and c) a sufficient background in the biology being studied (so that the algorithms/code generated are relevant to the biological hypotheses being explored).
**Full Time**  
Position: Computational Biologist  
Requisition number: RND00003069

This role is a full-time position focused on the development and application of continuum-based (ODE) physiological models of biological systems to enable or inform early decision-making on the selection of biological targets and materials for conditions of interest. Flexibility to implement and develop alternative computational modeling strategies related to systems biology is also expected. The successful candidate will need to be comfortable working with scientists and engineers with a diverse background, such as peer modelers, experimental biologists, bioinformaticians, statisticians, engineers, etc.

**Job Responsibilities**  
Leverage and integrate public and proprietary data from a variety of sources (clinical, in vitro, -omics, analytical), to develop mechanistic computational models of biological systems and to apply them towards various conditions of interest.  
Generate hypotheses of biological mechanisms and work with experimental biologist(s), clinical scientists, engineers to test predictions from computational models.

**Additional Job Requirements**  
Experience working with mechanistic computational modeling in a biological context (Large-ODE Systems, Agent-based models, etc.). Demonstrated skills in developing/improving/analyzing/applying systems biology/pharmacology models.  
Passionate about solving challenging problems using modeling and simulation tools. Broad experience in using systems biology approaches for the interpretation of physiological responses, cellular processes, and/or biomarker discovery, etc. We are particularly interested in candidates who have experience with integrating data across various sources.  
Excellent programming skills in one or more of the computer languages, such as C/C++, Python, R, Matlab etc. Excellent communication skills, being able to simplify complex modeling ideas and explain to people without modeling experiences.
**Full Time**

Position: Scientist

Requisition number: RND00003072

We are seeking a Scientist with experience in molecular biology and expertise in microbial community analysis. This individual will play an important and visible role in the Global Biotechnology genomics team leading the emerging metagenomics team. Responsibilities include the design and execution of next-generation metagenomics experiments to address the diverse business needs of our BU partners and the TPT organizations. Applicant must have significant experience with molecular biology techniques and strong microbial community analysis experience. Familiarity with next-generation sequencing and/or gene expression profiling is a plus. Strong capacity to develop robust SOPs and operate within an SOP environment are required as is the ability to deliver against aggressive timelines. As the genomics team maintains multiple collaborations throughout the Company and is externally focused for identification of new technologies, strong teamwork and interpersonal skills are also mandatory.

**Job Responsibilities**

Develop and maintain state of the art metagenomics capabilities. Establish operating SOPs and continually strive to improve and these capabilities; making them better, faster, and less expensive to execute.

Work closely with business teams to fully understand their current discovery projects and commercial needs and develop technical strategies to drive business results

Understand the landscape of emerging technologies, esp. next-generation sequencing tools.

Advocate and implement cutting edge tools and methods to advance programs

Act as the go-to expert, both internally and externally, for next-generation sequencing and metagenomics as it applies to consumer-relevant endpoints. Develop collaborative working relationships with external experts to continuously strengthen the capability.
Full Time
Position: Fabric & Home Care Analytical Scientist
Requisition number: RND00003052

Seeking PhD level Chemist with degree in Analytical, Physical, or Organic Chemistry to work innovative, interactive problem solving in an R&D environment. Desire strong background, interest, and/or experience in Analytical Sciences.

Job Responsibilities
General knowledge in the fields of chromatography, spectroscopy, and or surface science - with specific expertise in at least one of these.
Innovative product and technology related problem solving, and, development of a range of chemical and physical methods applied to problems in R&D and manufacturing processes.
Mechanistic understanding of key technologies and formulations that deliver consumer delight in Fabric or Home care and development of models to connecting mechanistic understanding to product performance.
Develop new mechanistic understanding and application of new Analytical methodology for Fabric & Home Care through collaboration with external and internal partners.
Full Time
Position: Analytical Scientist
Requisition number: RND00003053

Seeking PhD level Chemist with degree in Analytical, Physical, or Organic Chemistry with an emphasis on and/or experience in separation science/liquid chromatography. The individual will work in an innovative, interactive, problem solving, R&D environment developing new Fabric and Home Care products. Desire strong background, interest, and/or experience in Analytical Sciences, specifically liquid separations. Polymer separation/characterization experience is a plus.

Job Responsibilities
Lead the separation science lab and build critical liquid separations capability within R&D for Fabric and Home Care
Interface/Partner with Product Development colleagues to drive new product innovations and provide fundamental problem solving through Analytical measurements
Provide mechanistic understanding of key technologies and formulations that deliver consumer delight in Fabric & Home Care and develop methods/models to connect mechanistic understanding to product performance.
Collaborate with internal/external partners to develop/validate Analytical methods to ensure compliance, quality and readiness of product initiatives
Conference
Position: FIRST
Requisition number: RND00003000

Focusing on Industrial Recruitment of Scientific Talent (FIRST) Conference*
Procter & Gamble (P&G) is committed to maintaining a diverse workforce. The Company has a strong and successful diversity program, as evidenced by P&G receiving the U.S. Department of Labor's prestigious Opportunity 2000 Award, which recognizes equal-employment hiring, retention, and advancement. P&G's commitment to equal employment opportunity is not one in word alone, which is why the Company, its minority scientists, and the Ph.D. Recruiting office developed this unique conference in 1990, intended to give participants a deeper understanding about industrial research careers.

Participants will travel to Cincinnati-based technical centers to view industrial careers in action, network with a group of successful minority scientists and other professionals whose leadership in science and technology is well established, and gain a deeper understanding of the realities of cultural and workforce diversities.

The FIRST Conference is a unique recruitment opportunity that will be held September 18-21, 2016, in Cincinnati, Ohio. All travel expenses and hotel accommodation costs will be paid by P&G. Participants could leave this conference with a day visit invitation and may be considered for future employment at P&G.