



## Bioscience Needs and Opportunities - Overview

### 1. Health and Medical Sciences

- Pharmaceutical
  - Musculoskeletal
  - Gastrointestinal
  - "Women's Health"
  
- Non-pharmaceutical
  - Bone
  - Chemoreception
  - Dermatological - including Skin, Hair Follicles and Hair
  - Gastrointestinal
  - Inflammatory/Immune
  - Longevity/Anti-Aging (focus on pets)
  - Microbiology
  - Oral Care/Teeth/Gums
  - Pain
  - Respiratory
  - Uro-genital

### 2. Physical Sciences

- Cleaning Technologies (biological surfaces)
- Cleaning and Drying Technologies (laundry and hard surfaces)
- Diagnostic Devices
- Food Technology/Processing
- Materials Sciences/Formulation
- Synthesis/Processing/Biotransformation
- Water Purification

### 3. Capabilities

- Chemical/Natural Product Libraries and Databases
- Clinical Capabilities
- Drug Delivery/Product Delivery
- Molecular Biology/Biochemistry Capabilities

Visit [www.pgbioscience.com](http://www.pgbioscience.com) to search all needs and to submit technologies

## **“Higher Order” Needs**

- For product categories that P&G competes in, we are interested in any technology or product that has data supporting that it is better than, or has the potential to be better than current technologies or products
- Any natural-based products and/or technology that has clinical data showing an improvement in energy, fatigue, mental alertness, stress, sleep, gastrointestinal function, common cold
- Technologies for slowing skin aging or mitigating the effects of aging (wrinkles, texture, tone, age spots)
- Hair removal/growth/inhibition technologies
- Technologies to deliver vibrant color to hair without hair fiber damage or skin toxicity
- Opportunities that control microorganisms that play a role in dandruff
- Technologies that improve hair shine, enhance color vibrancy and delay hair graying
- Methods for improving the delivery and control or release of active agents to skin, hair (follicles and shaft)), oral cavity, clothing
- Methods that either kill or reduce metabolic activity of odor-promoting microorganisms
- Methods and ways to disrupt or inhibit the development of biofilms
- Non-drug agents (that could be used as excipients in a formulation) which would enhance the performance of known orally used antibacterials (i.e., CPC, SnF2, essential oils)
- Non-abrasive cleaning alternatives for teeth with no performance trade-offs
- Any method that provides controlled heat generation for treatment of muscle and joint pain
- Mild, high lathering, low cost surfactants that are not irritating
- New developments in understanding enzyme activity (lipase, catalase, amylase, protease, etc) at the soil-fabric interface
- Catalytic soil disruption: Elimination of enzyme cofactors
- Technologies that reduced water/energy usage with cleaning - machine synergy (e.g., ultrasonics, filtration, EW, light, etc)
- Technologies that prevent soil adhesion on hard surfaces (show/bath/car/etc.)
- Novel stain removal & prevention technologies for fabrics and hard surfaces
- Methods and technologies to maximize cleaning performance in cold water laundering
- Surfactants (biosurfactants or natural ingredients that can be used as surfactants)
- Encapsulation technologies
- Any technology that can reduce the caloric density of Pringles but not affect taste or texture
- Coffee decaffeination process that does not alter the taste or chemical composition of coffee other than to remove caffeine (e.g., low temperature process for decaffeination)
- Technologies (e.g., enzymes) or processes for breaking down the coating of coffee beans to increase yield and flavor for instant coffee
- Cost effective process to convert excess glycerine to high value products
- Sources of high value intermediaries (e.g., ethylene, propylene, acrylic acid, etc) from renewable sources that has the potential to be cost-competitive to current sourced material
- Biodegradable, biorenewable replacements for cellulose and petro-derived materials such as polyacrylates
- Low cost material to replace absorbent gelling materials in diapers
- Cost-effective clinical sites to conduct studies for any product categories in which P&G competes