

Mrs. Varacalle has 20 years experience in the Commercial Construction industry where she has prepared master plans, contract documents, and project management services for single buildings as well as campus facilities. Projects have range from R&D manufacturing facilities to renovation speculative laboratory fit-outs. Her experience as a mechanical engineer in the consulting engineering field will bring a qualified skill set for this project.

Mrs. Varacalle's technical knowledge and a skillful management style have been rewarded with more opportunities for projects in the pharmaceutical field. Her project experience ranges from commercial and institutional facilities to laboratories and sensitive clean rooms for genomic and biomedical research.

**Representative
Project Experience**
*(some experience
while at another
firm)*

- **Advanced BioScience Laboratories**, Rockville, MD – Design and Construction of a 3 story, 70,000 ft² laboratory facility. The project included the total renovation of an existing building. One floor included an eight suite GMP contract clean room facility totaling 22,000 ft². One floor included R&D Laboratories and the remaining floor included administrative and mechanical support spaces. The project was designed, constructed and operating validation completed in a 14 month period. Total project cost is \$15 million.
- **Hyperbranch, Durham, NC** – Mechanical project manager of mechanical, electrical and plumbing design/build project involving design and construction of a complete laboratory and office fit out in an existing facility in RTP, NC. The 25,000 SF, fit out accommodates clean room space for the manufacture of medical products, R & D, QC and QA laboratories.
- **WR Grace, Columbia, MD** – Complete master planning, engineering services and mechanical and plumbing construction for several design build and design-bid-build renovation and fit out projects.
Projects included \$30 million phased fit out in building 16 to support the UNIPOL™ Polypropylene Process Technology Licensing and Catalysts Business, various chemistry lab renovations in Building 2 and Building 30 and the new World Headquarters building.
- **Shire Manufacturing U.S.**, Baltimore, MD – Multiple projects including: design and construction administration for the addition of a solid oral dosage manufacturing facility, design and construction administration for the addition of a controlled substance solid oral dosage manufacturing facility; design and construction administration for the renovation of QC, QA and HPLC laboratories; and design and construction administration for the provision of an FDA controlled substance warehouse.
- **Human Genome Sciences**, Rockville, MD – Complete engineering services for over 20 projects in over eight years.
- **Pharmaceutics International, Inc.**, Hunt Valley, MD – Design-Build project consisting of mechanical, process piping and plumbing installation for phase one fit out of 100,000 s.f. solid and liquid contract production facility.
- **Intercell Corporation (formerly Iomai Corporation)**, Gaithersburg, MD – Complete engineering services for three phases of build out in an existing 56,000 ft² building over a five year period.
Several turnkey design-build projects consisting of expansion of pilot plant to launch light commercial biotech products, installation of new dehumidification system, process glycol, process cooling water and process waste piping, installation of new processing equipment and installation of new clean steam generation equipment.

JENNIFER R. VARACALLE, P.E.

Education

- B.S. in Mechanical Engineering, 1995
University of Maryland, Baltimore, MD
- B.S. in Mathematics, 1995
University of Maryland, Baltimore County, MD

***Licenses and
Affiliations***

- Licensed Professional Engineer: MD License No. 30757
- International Society for Pharmaceutical Engineering (ISPE); Chesapeake Bay Area Chapter
- American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE), full member