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## Centyrins, a novel protein scaffold with ideal properties for cancer imaging and detection

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Centyrins, a novel class of alternative scaffold protein based on a consensus fibronectin domain, are being developed to be the next generation of biological therapeutics. Centyrins also have biophysical properties ideally suited for cancer imaging and detection applications. Centyrins, which provide the specificity of an antibody, are rapidly developed to new targets of interest using *in vitro* display. Centyrins are easy to manufacture in multiple expression systems and have been engineered to be of low potential immunogenicity. Centyrins can be stored at room temperature and are mono-dispersed at high protein concentrations. The molecules are stable over a wide range of pH and have multiple sites amenable to site specific labeling and chemical coupling. Lastly, Centyrins are modular in nature and have been successfully engineered as bi-specific and higher order multimers. With a molecular weight of just 10 KDa, Centyrins are an ideal size for applications requiring a short half-life, though the molecules are also compatible with several half-life extension strategies if a longer half-life is required. The small size and robust biophysical properties make them amenable to multiple delivery methods allowing for high concentrations at the site of disease, while simultaneously lowering toxicity to non-target organs. In addition, due to their small size, Centyrins may penetrate further into tissues resulting in higher sensitivity for imaging applications. In this presentation, the latest *in vivo* and *in vitro* data will be presented to showcase the highly desirable biophysical properties of the Centyrin molecule as cancer therapeutics, imaging and detection agents.

### Biography

Jeannie Rojas is a Sr. Director with Janssen Research & Development, a Johnson & Johnson Pharmaceutical Company. Her last six years at Janssen have been with Centyrex, a Janssen Internal Venture which focuses on alternative scaffold therapeutics. Prior to Centyrex, she has held positions of increasing responsibility in R&D and Clinical Pharmacology. She has a PhD from the Department of Chemistry at the University of Pennsylvania.

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