Problem – Challenge
Approximately 300,000 patients receive a bowel ostomy every year worldwide. This surgical procedure is often necessary because of gastrointestinal cancer or infectious bowel disease. Every third patient develops a herniation of the ostomy during the first three years after the initial surgery. Due to the artificial hole in the abdominal wall and the continuous intra-abdominal pressure the abdominal wall is weakened particularly in the area of stoma formation. That leads to a relaxation of the abdominal wall and formation of a parastomal hernia.
A parastomal hernia has the risk of several complications: pain, skin irritation, bowel obstruction, surgical re-intervention, stoma prolapse, cosmetic and social problems.

Solution
The invention is a circular shaped ring that is implanted in patients receiving a permanent stoma. It is available in different diameters for precise fitting. The diameter of the small bowel or the colon will be measured during the surgical procedure and then the optimal ring diameter can be chosen. The KORING is braided from biocompatible material and can be implanted in the human body for the whole life. The ring is flexible but not dilatable. This feature is important for the efficacy of the technique. As described above, the cause of the herniation is the debility of the abdominal wall after the stoma formation. Without the ring the abdominal sheaths of the muscle retract and the herniation proceeds. By fixating the layers of the abdominal wall to the ring the axial forces are evenly distributed to the ring and the weakening of the abdominal sheat is minimized and formation of a hernia can be prevented.