Introduction
Laparoscopic inguinal hernia extraperitoneal repair is a difficult task to learn. The number of cases required to become proficient during surgical training is uncertain. This study aimed to assess procedure performance using a specific scoring system, to compare resident performance along training years and construct personalized feedback of operative skill to trainee.

Methods
Resident operative performance was recorded using the ABS operative performance assessment form. It was analyzed in relationship to trainee prior experience in laparoscopic inguinal hernia repair, as well as basic and complex laparoscopic procedures and controlled for anatomical difficulty of the patient. OR time was recorded using the same procedure specific steps checklist (access, cord dissection, hernia sac reduction, mesh placement). Mixed effect logistic regressions was applied to the surgical experience and evaluation scores. Mixed effect linear regression with continuous outcome was used for OR time. Predicted probability values are plotted.

Results
The study included 12 residents in a general surgery training program and 100 procedures performed over 18 months. A strong positive correlation was found between prior resident experience and each of the surgical steps. Mesh placement scores are stronger correlated with experience and difficulty than other procedural steps ($p<0.05$). Operative times are inverse correlated with experience but not statistically significant. Performance correlates negatively with anatomical difficulty.

Conclusion
Progress is quick only for port placement. Resident proficiency can be achieved after 25 cases with a 95% probability of success without attending surgeon assistance. Learning curve mirrors number of prior complex and basic laparoscopic cases. Individual resident performance over time can be analyzed in comparison to training program averages and personalized feedback constructed to guide further training needs.