The Medical Science Liaison role has been rapidly expanding in the past decade. Between 2005 and 2007, the top 25 pharmaceutical companies saw a 133% increase in their dedicated MSL team sizes. Most pharmaceutical companies have implemented a formal new hire training process to ensure that their MSLs are ready for the field, but this process varies among different companies. Though there has been a study that discusses some general MSL training practices and there is little data that discusses specific modalities and tools used to train new-hire MSLs. For the purposes of this research, MSL On-Boarding Therapeutic Training is defined as product and disease state training conducted within the first 6 months of hire.

To determine whether there is a high correlation between the most frequently used and most valuable methods of training, there is a significance to evaluate knowledge assessments, from the point of view of the MSL.

An anonymous, web-based survey consisting of 24 questions was distributed to medical science liaisons at 31 pharmaceutical and biopharmaceutical companies. This distribution was done via e-mail and included a request to forward to other MSLs at the respondent’s discretion. The survey was designed to capture demographics, currently used MSL on-boarding training methods, and opinions of MSLs in regards to on-boarding training. Respondents were not required to answer every question. This research was IRB reviewed and received exempt status.

There were 54 total responses received from 16 distinct pharmaceutical and biopharmaceutical companies:
- 46 respondents (87%) completed the entire survey.
- 46 respondents (87%) reported that they are currently working as an MSL.
- 35% of respondents have worked as an MSL for >10 years.
- 21% have worked as an MSL for 6-10 years.
- 44% have worked as an MSL for <6 years.

85% of respondents (n=46) reported that they had received formal on-boarding therapeutic training at their current company.

Out of the 16 surveyed pharmaceutical companies represented by the respondents to this question, MSLs from 12 (75%) of them reported having formalized on-boarding therapeutic training.

The highest level of MSLs ranking an item as “most frequently used” in 2 of the 16 companies, but the response representing the majority for that company was used for the calculation.

Challenges 1 survey question: how many times each individual method of training was ranked in (1) the top 5 most frequently used and (2) top 5 most valuable.

• Didactic teaching has more MSL’s ranking it as “most frequently used”.
• 50% of respondents have worked as an MSL for >10 years.
• 60% out of the 14 distinct pharmaceutical companies represented by the respondents to this question, MSL’s from 12 (85%) of them have established a formal new hire training process to ensure their MSL’s are ready for the field, but this process varies among different companies.
• 20 former or current MSL’s (40%) reported having experience both working for a company that does not require formally evaluated knowledge assessments and a company that does.
• 80% of respondents (n=36) reported that formally evaluated knowledge assessments were a required part of their formalized on-boarding training.
• Only 10% (n=5) of respondents reported having formalized on-boarding training.
• Few MSL’s were required to present self-created materials, but more than half found it to be valuable.
• Many of the surveyed MSL’s agree that formally evaluated knowledge assessments help them feel more prepared for their role as MSLs and would continue to prefer their career with their company.

Surveys were evaluated with varying results. Some indicated that knowledge assessments helped them feel more prepared for their new MSL role, while others felt that they did not.

Out of 50 respondents, 23 former or current MSLs (46%) reported having experience both for a company that does not require formally evaluated knowledge assessments, and for a company that does.

Out of the 43 respondents who reported having experience with required formally evaluated knowledge assessments, 33 (77%) agreed that the assessments helped them feel more prepared for their new MSL role.

A large proportion of MSLs surveyed reported receiving formal on-boarding therapeutic training and being required to take formally evaluated knowledge assessments as part of that training.

A significant high correlation between the methods ranked as most frequently used and most valuable; however, these variances are with a >10% disparity.

Didactic teaching has more MSL’s ranking it as “most frequently used”.
• Medical conferences and external online learning (CE Programs) have more MSL’s ranking them as "most valuable".
• Respondents formally evaluated knowledge assessments:
  - Only half of the MSL’s that have been required to take company created quizzes as part of their training found them to be valuable.
  - Few MSL’s were required to present self-created materials, but more than half found it to be valuable.
  - Many of the surveyed MSL’s agree that formally evaluated knowledge assessments help them feel more prepared for their role as MSLs and would continue to prefer their career with their company.

There are a few areas of improvement for more efficient utilization of certain training methods and knowledge assessments, including increased use of medical conferences as formal online learning, and decreased use of didactic teaching for training. Regarding knowledge assessments, an increased use of presentations of self-created materials, and a decreased use of computer-based quizzes should be considered.

### References

- Rutger University; New Brunswick, NJ, USA.