This image contains a document on the development of optimized 3D migration and invasion assays for siRNA screening. The document is authored by Esteban R. Carrillo and Patricia J. Keely from the Graduate Program in Cellular and Molecular Biology, UW-Madison and the Department of Pharmacology, UW-Madison.

The document includes a timeline for high-throughput screening, an abstract, tested assays, and references. The abstract discusses the use of high-throughput screening approaches to determine small molecules that inhibit migration of cells across 2D surfaces. The authors describe a method to perform a siRNA screen in 3D collagen matrices that are more relevant to in vivo migration using breast cancer cells. This involves testing how cells interact with the extracellular matrix and the signaling pathways involved in breast cancer metastasis. The authors have used a variety of cell lines and methods to monitor genes whose knockdown perturbs 3D cell migration.

The tested assays include ORIS™ Assay by Platypus Technologies and Transwell® from Corning. The invasion assay summary highlights the benefits of using iuvo microchannel by BellBrook Labs for reverse and live monitoring.

The references include studies on breast cancer cell migration and the signaling pathways involved. The document also includes acknowledgments, thanking lab members in the Keely Lab and BellBrook Labs, LLC.

The key points from the document are:
- Development of optimized 3D migration and invasion assays for siRNA screening.
- Use of high-throughput screening approaches.
- In vivo relevance of 3D collagen matrices for breast cancer cell migration.
- Testing of genes involved in breast cancer metastasis.
- Use of iuvo microchannel for live monitoring.
-References to previous studies on breast cancer cell migration and signaling pathways.

Acknowledgments: Lab members in the Keely Lab and BellBrook Labs, LLC.