

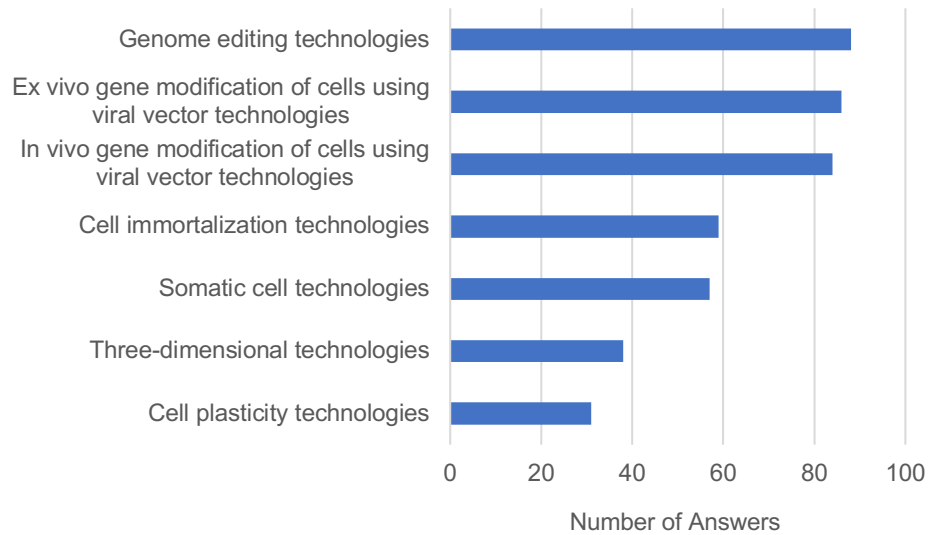
Cell Therapy Researchers Prepare to Make Instrument Purchases

IBO's fall 2020 survey of researchers focuses on the area of cell therapy. Cell therapy has been heralded as a breakthrough for disease treatment, particularly oncology. As of March 2020, there were 1,483 active agents for cancer cell therapy in development, a 47% increase, according to *Nature Reviews Drug Discovery*. According to the Alliance for Regenerative Medicine, cell therapy companies raised \$7.5 billion in financing in the first half of 2020, a 387% increase (see **IBO** 8/17/20).

The survey was conducted by the Science Advisory Board (SAB), a community site for life science and biomedical researchers and professionals managed by BioInformatics Inc., part of Science and Medicine Group. BioInformatics Inc. is a sister company of IBO's publisher, Strategic Directions International (SDi). The survey was conducted online in early October and garnered 147 responses (see demographics below).

With more than one answer possible, the highest number of respondents are working on cell therapy involving genome editing technologies, ex vivo and/or in vivo gene modification of cells using viral vector technologies. Respondents were given seven choices.

Type of Cell Therapy(ies) Working On*



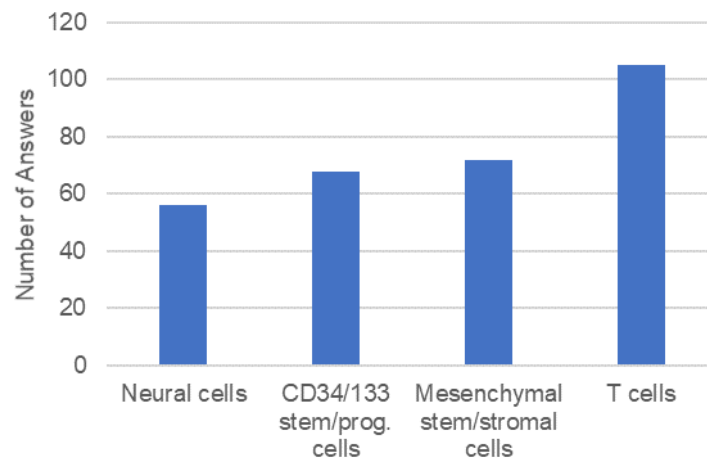
Source: Science and Medicine Group

*Classification categories adapted from Mount, N., Ward, S. et al. Cell-based therapy technology classifications and translational challenges *Philos Trans R Soc Lond B Biol Sci.* 2015 Oct 19; 370(1680).

As for donor type, 68% of respondents are working with both autologous and allogenic donors, while 18% and 14% respectively are working with allogenic or autologous donors only.

Asked what cell type(s) they are working with and given a choice of four answers with multiple answers possible, over 100 respondents indicated they are working with T-cells. Less than 100 are working with mesenchymal stem/stromal cells, CD34/133 stem/prog cells and neural cells.

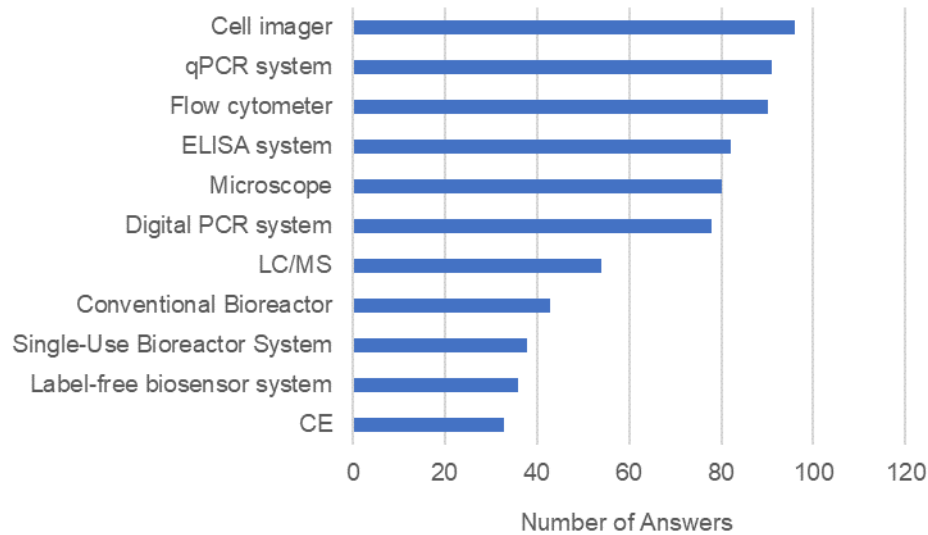
Type of Cell(s) Working With



Source: Science and Medicine Group

To ascertain future purchasing habits of these labs with respect to analytical instrumentation for R&D, **IBO** asked survey participants which analytical instruments or equipment from a list of 11 choices their labs plan to purchase in 2020 or 2021, with more than one answer possible. Cell imagers, qPCR systems and flow cytometers were the most popular answers with over 90 participants each planning purchases.

Analytical Instruments or Equipment Respondents' Labs Plan to Purchase in 2020 or 2021 for This Work



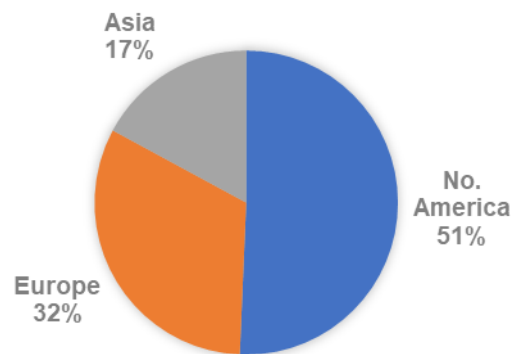
Source: Science and Medicine Group

What is even more positive for prospective purchases by labs in this field is that 82% of respondents plan to buy more than one instrument type, with five being the average number of instrument categories for which an instrument purchase is planned.

For those respondents planning to purchase an instrument in just one category, there was no clear pattern of instrument type favored for the purchase; however, cell imagers were chosen by the highest number of these respondents.

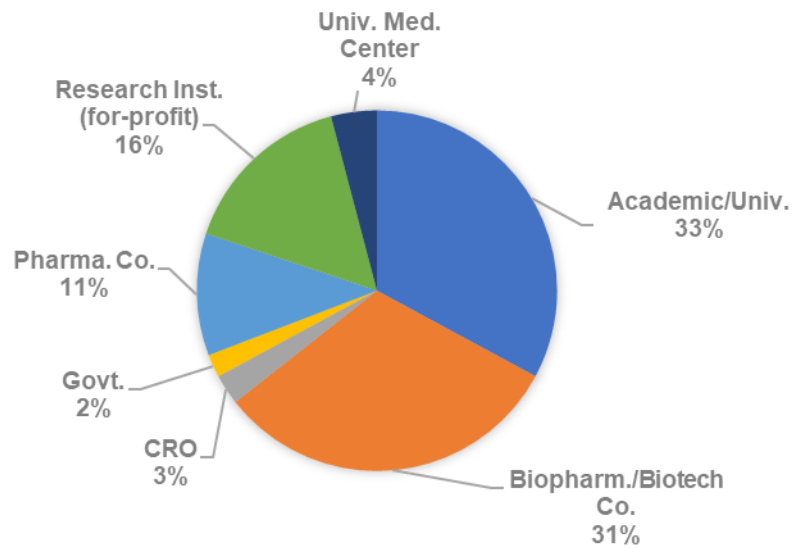
Demographics

Region



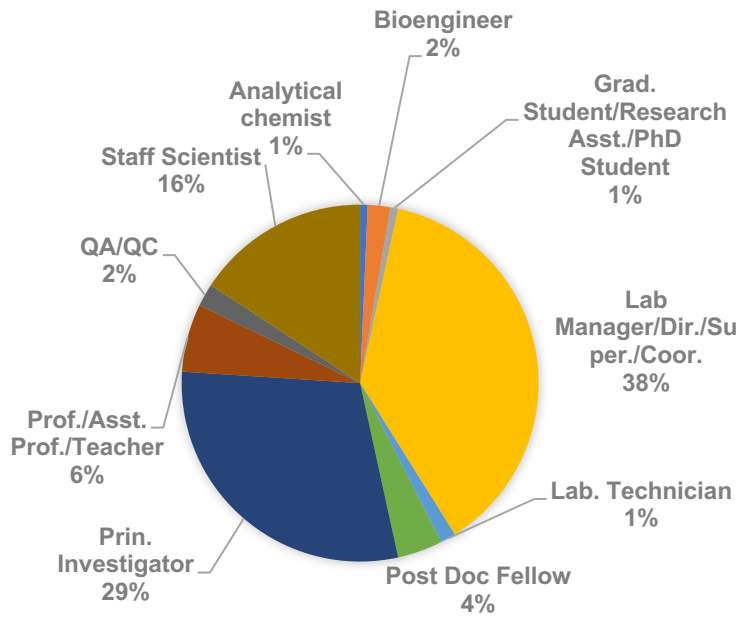
Source: Science and Medicine Group

Institution/Company/Organization



Source: Science and Medicine Group

Job Position



Source: Science and Medicine Group