

## THE DISTILLERY

## This week in techniques

| Approach   | Summary   | Licensing status                           | Publication and contact<br>information   |
|--|---|--|--|
| Imaging  |   |  |  |
| Tumor-penetrant heat<br>shock protein 70<br>(Hsp70)-targeting<br>peptide for near-infrared<br>fluorescent (NIR) tumor<br>imaging | An Hsp70-targeting peptide could be useful for imaging a broad range of tumor types. Hsp70 is highly expressed in multiple human tumor types but absent in normal tissues. In multiple mouse xenograft tumor models, a 14-mer peptide targeting an extracellular Hsp70 epitope conjugated to an NIR fluorophore was selectively internalized by tumor cells but not by tumor-associated fibroblasts, tumor-infiltrating macrophages or normal tissues and enabled high-contrast NIR tumor images. In the models, the peptide-fluorophore conjugates enabled generation of higher contrast images than IntegriSense 750, a fluorescent probe that binds integrin $\beta_3$ (GPIIIa; CD61). Next steps could include testing the safety of the peptide in animals. PerkinElmer Inc. markets IntegriSense as an imaging agent. | Patent and licensing<br>status unavailable | Stangl, S. <i>et al. Cancer Res.</i> ;<br>published online Oct. 9, 2014;<br>doi:10.1158/0008-5472.CAN-14-0413<br><b>Contact:</b> Gabriele Multhoff, Technical<br>University Munich, Munich, Germany<br>e-mail:<br>gabriele.multhoff@lrz.tu-muenchen.de |

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