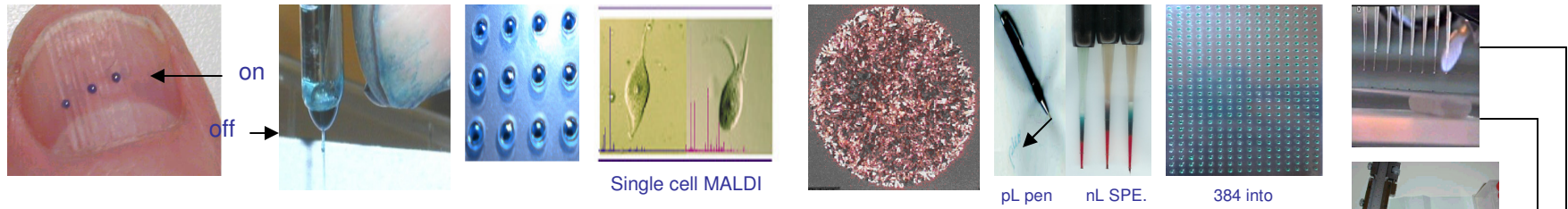


Induction Based Fluidics (IBF) flies liquids to targets for many purposes.

IBF can energize liquid drops (not sprays) such that they 1. **launch** kinetically (i.e. fly), to targets as they are 2. **directed** to the target of all types where upon landing they can be 3. **measured** using one circuit. IBF can fly liquids up, down, left or right across a massive dynamic range (nL, uL, pL and (fL?)) with as few as one source of energy without moving parts, joule heating or adverse electrochemistry like ESI. IBF can dispense viscous liquids like serum, blood and some glues. In fact, IBF is the most cost effective liquid handling tool that can dispense and treat liquids across the widest dynamic volumetric, viscosity range at the lowest cost per channel of any technique in the world. Unlike other techniques, that cost \$k1 per channel and vibrate expensive matter that breaks frequently, we vibrate electric fields that virtually never break and that can drive hundreds of channels. Recent exciting applications include single cell MALDI at U WI, dramatic increase in sensitivity of SIMS, MALDI and DART (literally 10 to 100x) by NIST, NIH, U Washington and JEOL. Also, as IBF shoots liquids in a straight line, we believe that IBF may replace ESI for MS sample introduction, as we can shoot 100% of samples into MS's as we did with a DART Accu TOF at Pittcon 09 and with the US Army at Edgewood Arsenal, MD. IBF is simple, but exciting patented technology.

Shoot nLs onto human, other targets or **pull** nLs, pLs off !!! of a human, sample.

Excellent quality, accurate depositions, onto **into** targets. Different devices, single or N channels.

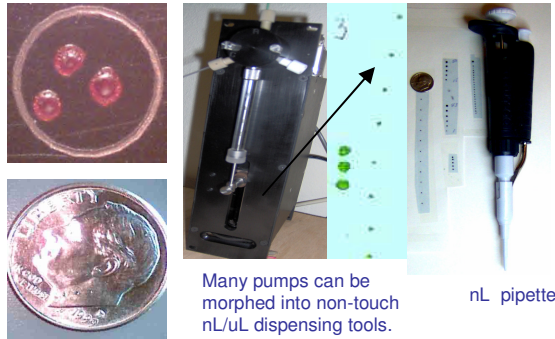


Single cell MALDI

pL pen

nL SPE.

384 into

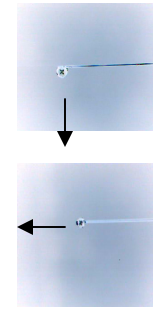


Many pumps can be morphed into non-touch nL/uL dispensing tools.

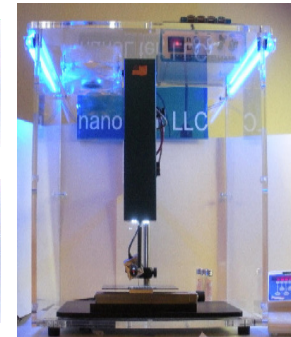
nL pipette



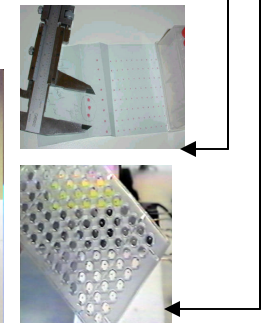
nL Cool Wave Dispenser X



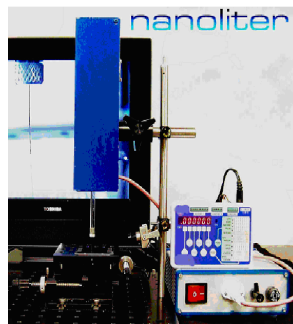
E field off/on drops



nL Cool Wave Dispenser VII



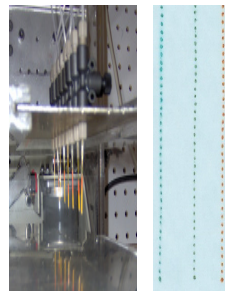
IBF can morph most dispensers into non-touch nL/uL devices, at low per channel costs as it uses 1 source of E.



nL dispenser Cool Wave V



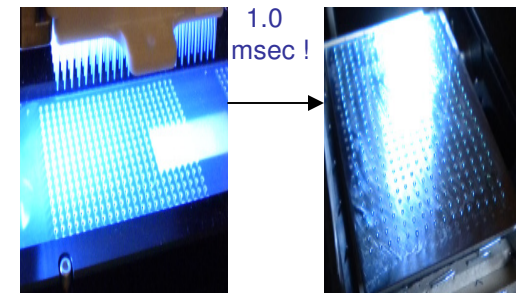
Append IBF to YOUR fluidic systems, e.g., Spark Holland's Alias.



Parallel LC/MALDI. Scienc offered to license.



Shoot 100% of that sample into your DART Accu TOF MS, or other instruments!



384 channels fired in 1 msec. Fastest on planet!