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We aim at creating new generations of devices, tools and procedures for biological and chemical applications. Our research is dedicated to develop and use microfluidic system to perform experiments that are out of the possibilities of existing technologies. Within other, our projects aim at : (i) developing microfluidic platforms and strategies allowing to characterize and understand tumor heterogeneity and its implication for cancer research and treatment management; (ii) creating new generations of microfluidic devices for the non-invasive detection of cancer biomarkers with applications in personalized medicine, cancer recurrence detection and cancer diagnostics.

## COLLABORATORS

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## PUBLICATIONS

**High-resolution mapping of bifurcations in nonlinear DNA circuits.** A.J. Genot, A. Baccouche, R. Sieskind, N. Aubert-Kato, N. Bredeche, J.F. Bartolo, V. Taly, T. Fujii, Y. Rondelez. *Nature Chemistry* (2016), 8(8):760-7. *Pubmed*.

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