

Gianni Litti

Institute for Research on Cancer and Aging (IRCAN),
Nice | France
<https://people.embo.org/profile/gianni-liti>



Title: Saccharomyces variation across the world

Abstract:

An understanding of natural variation is crucial to efforts in current biology and to decipher the dynamics of genome evolution. The budding yeast, *Saccharomyces cerevisiae*, has emerged as a leading system for population genomics studies due to its small, well-characterized genome and experimental tractability. In the past decade, we assembled a large collection of natural isolates of *S. cerevisiae* and its closest relative *S. paradoxus* strains and characterized them at the genomic and phenotypic levels. We applied different sequencing and computational approaches to investigate origin, evolution, secondary contacts, and domestication of the species. These data provide a comprehensive view of genomic diversity in budding yeast and expose pronounced population-level differences.

Biosketch:

Dr. Gianni Litti is a senior CNRS researcher at the Institute for Research on Cancer and Ageing of Nice (IRCAN) in France. He studied biology and received a Ph.D. in 2000 from the University of Perugia (Italy) with Prof. Alessandro Martini and postdoctoral training at University of Leicester and University of Nottingham with Prof. Edward Louis. He joined the IRCAN in 2011 and established the research group “Population genomics and complex traits”. Gianni Litti’s lab uses genetics and genomics to understand the evolutionary processes that shape natural variation at the population level. He serves as editor in chief of the journal *Yeast* (Wiley). He received the DuPont Young Professor Award (2015), the Accademia Nazionale dei Lincei “Giovanna Jucci” prize for genetics 2021) and Mortimer’s medal (2023). He was elected to the European Molecular Biology Organization (EMBO) member in 2021.