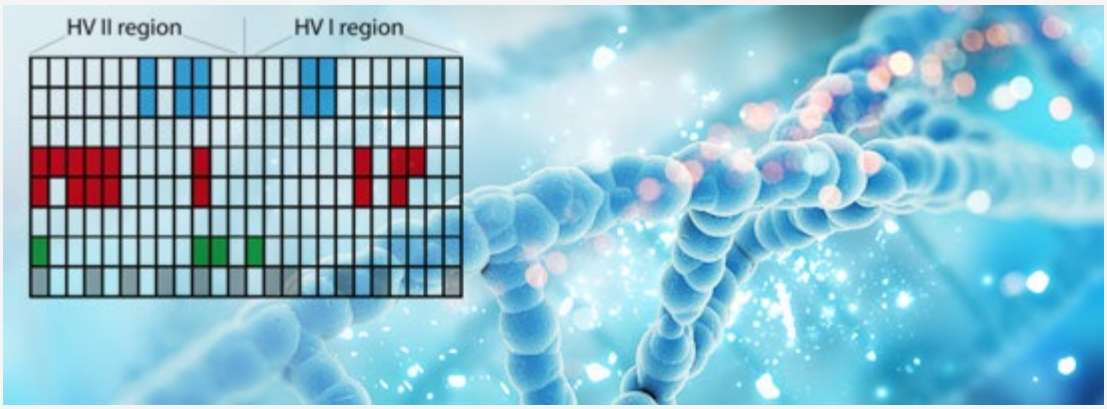
Implen Journal Club | July Issue

Here is our second issue of Implen Journal Club highlighting relevant publications where the Implen NanoPhotometer® helped researchers to unravel the mysteries of modern molecular biology.

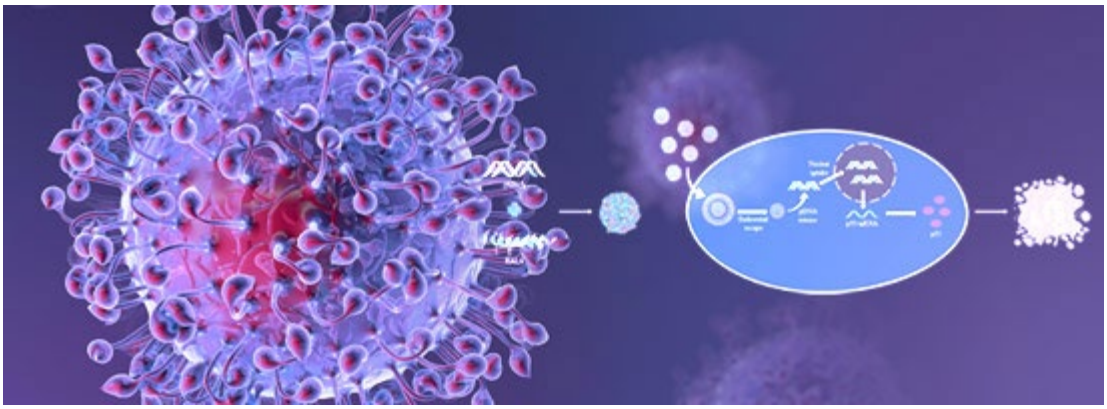
First, this Implen NanoPhotometer® Journal Club issue is about small but very important insects whose health should concern all of us: honey bees. A study, published 2020 in Scientific Repots, by Alexandria Payne, Tonya Shepherd and Juliana Rangel from Texas A&M University worked on virus transmission between ants and bees to determine whether ants can be considered mechanical vectors of honey bee-associated viruses. The Implen NanoPhotometer® was used to measure concentration and purity of extracted RNA samples as well as normalisation before reverse transcription into cDNA, following PCR amplification.

Learn more



The next Implen NanoPhotometer Journal Club issue is going to be mysterious and bloody. Jari Louhelainen from Liverpool John Moores University and David Miller from University of Leeds published their research on the “Jack the Ripper murders” in Journal of Forensic Sciences in 2019. They applied novel, minimally destructive techniques for sample recovery from forensically relevant stains on the evidence and separated single cells linked to the suspect, followed by phenotypic analysis putting together new pieces of one of the most famous unsolved crime puzzles. Silk dye colours of a shawl which was found at the murder scene of Catherine Eddowes were measured using the full wavelength scan capabilities of the Implen NanoPhotometer® together with our Submicro Liter Cell (SMC) identifying peaks at 210, 252, 287 and 630 nm.

Learn more



The third issue focuses on cancer gene therapy based on p53 tumor suppressor gene supplementation. The work of Ana Neves, ngela Sousa, Rúben Faria, Tânia Albuquerque, João António Queiroz and Diana Costa from University of Beira Interior, published 2020 in Colloids And Surfaces, improved cell-penetrating peptides in the development of tailored and high-performance p53 gene based platforms for translational cancer therapy. During this study the Implen NanoPhotometer® was used to quantify the amount of non-

bound pDNA at 260 nm.

Learn more

And the last but not least we would like to feature the research of Jakob Bücheler, Matthias Winzer, Christian Weber and Henning Gieseler from Friedrich-Alexander-University (FAU) Erlangen-Nürnberg, Merck KGaA and GILYOS GmbH, published 2017 in Journal Of Pharmacy And Pharmacology on high-throughput oxidation screen of antibody–drug conjugates by analytical protein A chromatography. They successfully applied a method to isolate mAbs by their degree of oxidation. The Implen NanoPhotometer® NP80 was used for drug-to-antibody (DAR) direct measurement quantifying fluorescin-5-maleimide conjugated proteins at 280 and 495 nm.

Learn more

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