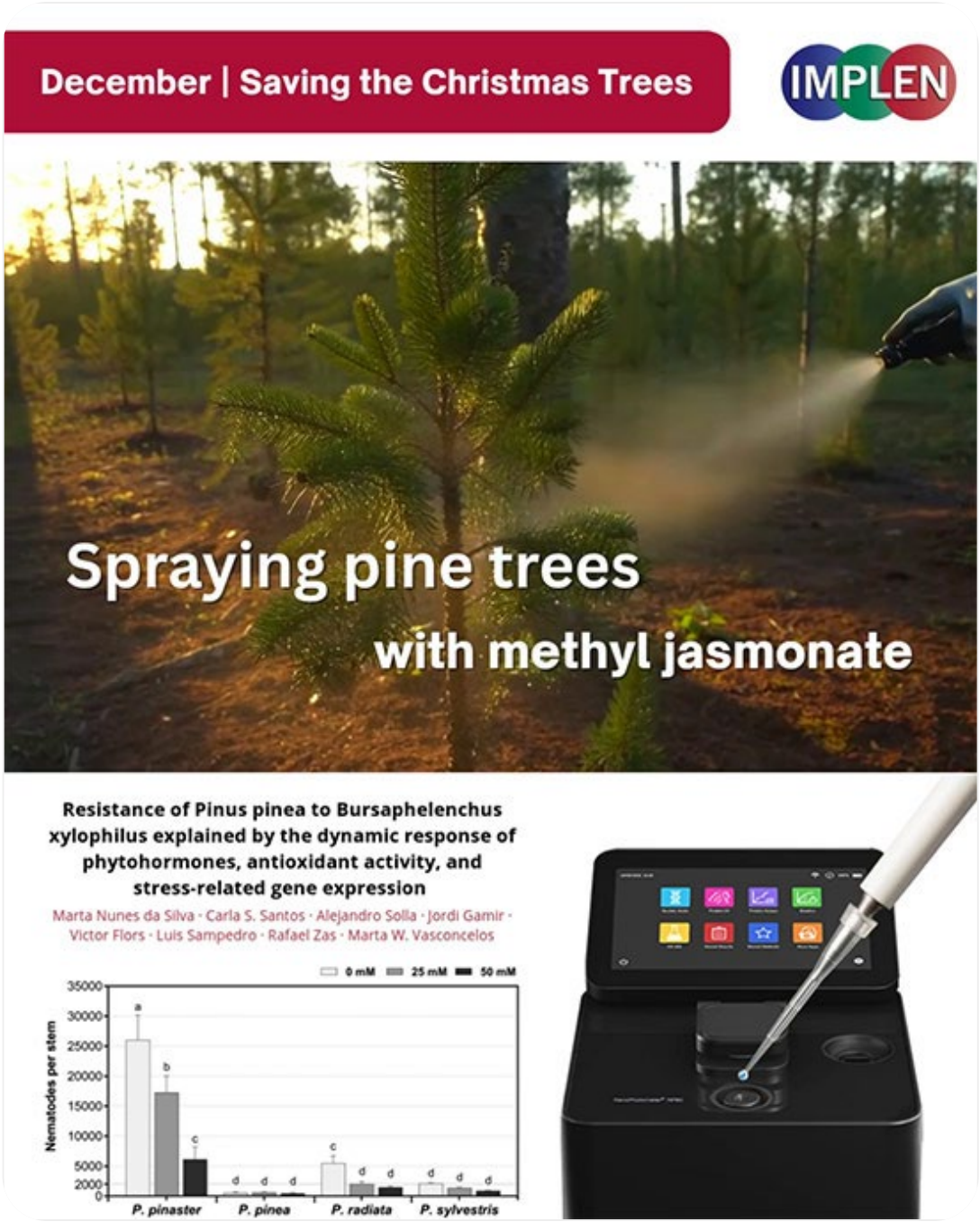
Implen Journal Club | December Issue, 2025

Explore Dec 2025 Featured Research Highlights



Saving the Christmas Trees

It’s time to put up the Christmas tree… and researchers are working hard to help protect these beloved pines.

A new study published in the journal of Trees showed that stone pine naturally mounts strong hormonal and antioxidant defenses against the destructive pinewood nematode. More vulnerable species struggle, but spraying them with a plant signal (methyl jasmonate) boosts their resistance. The Implen NanoPhotometer® NP80 was used in this work to measure absorbance at 663 and 645 nm to determine the chlorophyll concentration in the sample.

#Implen hashtag#NP80 hashtag#PlantScience hashtag#ForestHealth hashtag#PineResearch hashtag#TreeProtection hashtag#PlantHormones hashtag#SustainableForestry hashtag#ChristmasTrees hashtag#ScienceForGood

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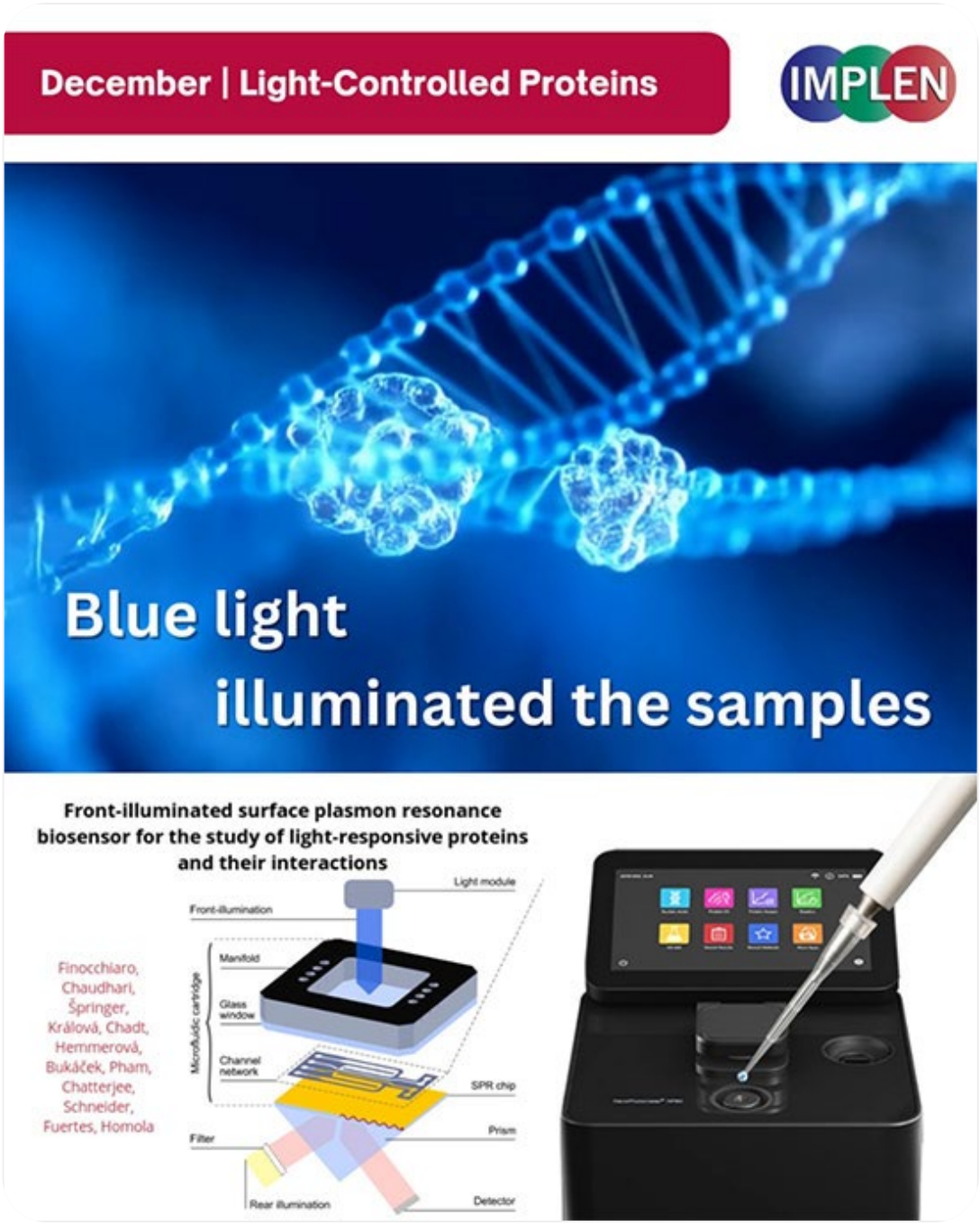


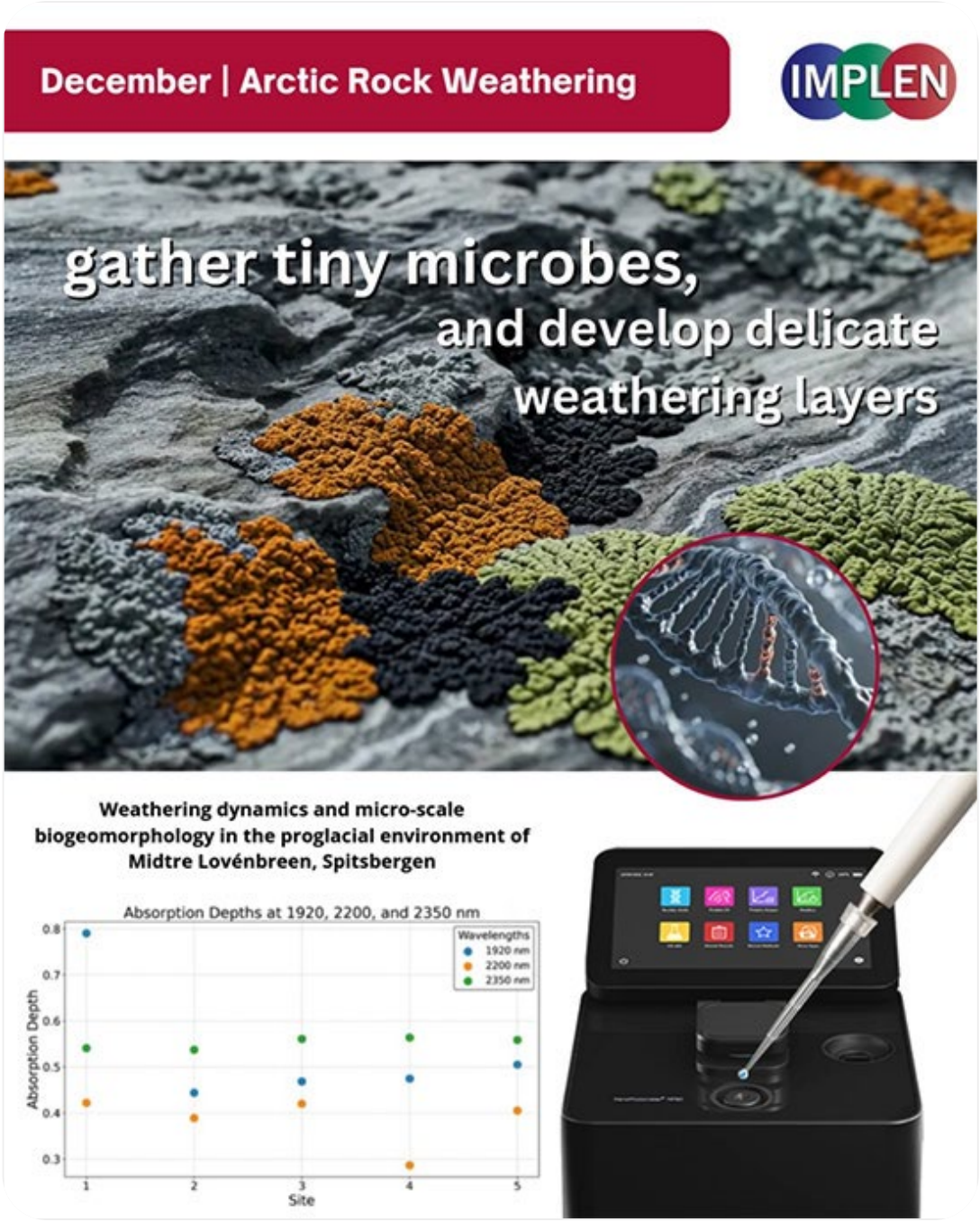
Lighting the Way: A New Tool for Studying Light-Controlled Proteins

As the season of holiday lights begins, scientists are also using light in a powerful new way. A recent article published in the journal of Biosensors and Bioelectronics introduced a sensor that let researchers watch light-controlled proteins in real time. By shining light directly on samples, they tracked how a blue-light-responsive protein (EL222) changed shape, formed pairs, and bound DNA—and even activated an engineered immune receptor—opening new doors for biotech.

The Implen Nanophotometer was used in this study to the absorption spectra of the light-responsive protein EL222. This demonstrated how the protein changed when exposed to blue light and how quickly it returned to its inactive state.

#Implen #Nanophotometer #LightScience #BiotechInnovation #Optogenetics #ProteinResearch #HolidayLightsScience

Learn more



Winter's Quiet Makeover: How Newly Exposed Arctic Rocks Come Alive

Even in the quiet stillness of winter, freshly uncovered Arctic rocks begin a lively transformation. A recent study found that once glaciers retreat, metamorphic rock surfaces slowly roughen, gather tiny microbes, and develop delicate weathering layers. Using tools that measure texture, hardness, and light reflection, it was shown how even cold, barren landscapes steadily grow more dynamic, complex, and full of hidden life.

The Implen NanoPhotometer NP80 was utilized in this study to determine the concentration and quality of DNA.

#ArcticScience #WinterResearch #HiddenMicroWorlds #GlacialRetreat #RockWeathering #MicrobialEcology #SpectralScience #Implen #NP80 #ClimateDiscovery #PolarGeology #ScienceInWinter #ColdButAlive

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