

# AGE SPOTS

## causes and cosmetic treatments

So called "Age" spots ("liver spots", lentigos, freckles) are more complex in nature than suspected. Sites of hyperpigmentation (melanogenesis) at sun exposed surfaces accumulate melanin with time, leading to inesthetic "spots" of darker colour.

Overexpression of genes, increased activity of enzymes, under the influence of solar exposure, stress, hormones, inflammation, can be cited among the various causes for these phenomena.

As long as these hyperpigmented areas are not of pathological nature (precancerous or melanoma), they can be approached by cosmetic means. Active ingredients in special creams can help in reducing the visibility of these spots by interfering with one or the other of the multiple pathways and crucial steps in melanogenesis.

With hydroquinone, the previous benchmark in this field, being banned in more and more countries because of irritation and other toxicological concerns, the cosmetic industry is looking for novel, effective, possibly "natural" ingredients of lower or absent side effects.

The webinar will address a few of the recent advances in the field, with examples of substances and their demonstrated mechanisms of action.