

Factors Influencing Melanocyte Migration: Control of Repigmentation in Vitiligo

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My laboratory work at this time is continuing in two directions, both concerned with the repigmentation of patients with vitiligo. Hair follicle outer root sheath melanocytes are thought to be the source for the repigmentation of Vitiligo. Little is known about these cells. We are characterizing these cell as well as attempting to grow them in culture. A better understanding of this cell will allow us to investigate the mechanism of "activation" of these cells which results in a change from a non-functioning cell to a pigment producing one. Secondly, we continue our work on the factors which influence melanocyte migration. We have now shown that many of the factors which are growth signals for melanocytes are also migration factors.

Using funds obtained from the NVFI, we have published 2 papers in the last 2 years concerning melanocyte migration. The first defined the technique for using time-lapse photography to study melanocyte movement, as well as defining some positive migratory factors (*J Invest Dermatol* 98:290-295, 1992). The second defined the roll of matrix proteins and integrin receptors on melanocyte migration (*J Invest Dermatol* 101:605-608, 1993).