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## Optical modalities for assessing the microcirculation in hypovolemia and anemia

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Stellingen behorend bij het proefschrift

**“Optical Modalities for the Evaluation of the Microcirculation in Hypovolemia and Anemia”**

door Sebastiaan A. Bartels.

1. Noninvasive volume clamp plethysmography adequately measures heart rate, stroke volume, and cardiac output both at rest and during exercise (this thesis).
2. Monitoring of the (peripheral) microcirculation can detect hypovolemia in an early phase (this thesis).
3. Alterations in the Peripheral Perfusion Index, Perfused Vessel Density, and Microcirculatory Flow Index indicate hypovolemia (this thesis).
4. The NIRS measurements on the forearm are more sensitive to lower body negative pressure induced hypovolemia compared to the thenar measurements (this thesis).
5. Although thenar and sublingual NIRS parameters are within normal range in chronic anemic hematology patients, red blood cell transfusion does increase these parameters (this thesis).
6. Het aantal co-auteurs van wetenschappelijke artikelen is disproportioneel toegenomen ten opzichte van de kwaliteit van de afgeleverde artikelen.
7. Duct tape is essentieel voor het slagen van ieder experiment.
8. Het competitieve streven zit stevig in de wetenschap verankerd, maar empathie ook.
9. De vergrijzing levert de gezondheidszorg een fors financieringsprobleem op, al biedt het ook een enorme groeiemarkt en kansen voor nieuwe ontwikkelingen.
10. De impact factor als kwaliteitsindicator van een wetenschappelijk blad kan zeer bedrieglijk zijn en zegt niet *per se* iets over de kwaliteit van het beschreven onderzoek.
11. *Without music, life would be a mistake* (Friedrich Nietzsche).