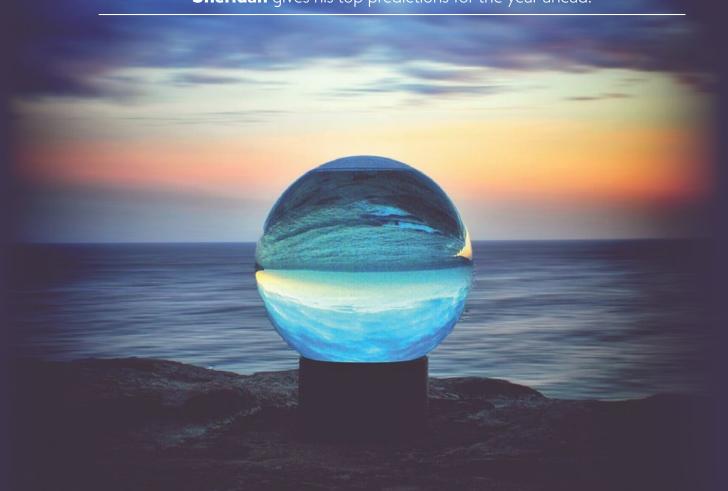


It can be risky predicting the future. That said, it is fun to imagine what lies ahead. It keeps us thinking and on our toes. Dermatologist Dr Adam Sheridan gives his top predictions for the year ahead.



Let us start with a given: the public will continue to move away from cosmetic surgery towards non-surgical beauty, medical and energy-based treatments. This was really brought home to me last year, when I was chatting with a plastic surgeon from America. He told me he had permanently put down his scalpel to wholly devote himself to non-surgical cosmetic medicine.

We too are finding the vast majority of our patients are selecting surgery-free treatment options wherever possible. My fellow males are especially quick to concede they are nowhere near as tough as women and become weak in the knees at the thought of a scalpel.

A gratifying related trend is the growing patient-driven focus upon maintenance and

prevention. Patients tell me they are now strongly motivated to address issues well prior to their progression to a point where surgery is the only option.

Medical technology will advance. It always does. The point I would make is that technology tends to advance in fits and starts. If this pattern continues we are due a major breakthrough in dermatology. Consider the most recent advance with worldwide impact was fractionated lasers more than 10 years ago; We are overdue.

The recent economic crisis made global research and development funding scarce. With the improvement in global economic conditions over the past year I predict increased cash flows to boost research and this should deliver a big paradigm shift and technical advance.

Advances are likely to come in the field of fillers and deep soft-tissue augmentation where 3D printing and bio-identical products cannot be far away. It will soon be possible to assess facial changes and then design and print 3D moulds and implants tailored to an individual's anatomical changes such as bone resorption and volume deficits with ageing, not to mention

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changes to the plastic tissues following disease and trauma. New forms of energy delivery will be developed. Laser wavelengths will continue to be tweaked. Alternate sources of light, RF, ultrasound and thermal energy will become available.

My other predictions are around biometric scanning technology. The potential is huge. Possibilities for deployment in dermatology, skin cancer diagnosis and management, and cosmetic therapy abound. For instance, patients may soon be able to scan their face directly, or upload photos that are then converted into a 3D image for assessment by a doctor at another location. The doctor may even elect to 3D print the image so they can feel and assess the subject in an even more tangible way and diagnostic algorithms may also be applied. Think of the immense possibilities in this vast land of ours which is so subject to the tyranny of distance and commuting stress. Scenarios where a second opinion from an interstate or international expert is easier to obtain beckon.

Surgical robotics will also progress further. Maybe to a point to where one simply places one's face into a mould programmed with desired end parameters (i.e. your best features from the past - again collected from previous photos or scans) and an all in one procedure ensues to deliver these end points.

There may of course be unforeseen negative consequences of such advances. Perhaps we will receive unsolicited advertising on social media from faceless algorithms that have captured and analysed our posted images, telling us how much we have aged in the last five years and how we need procedures X, Y and Z to keep up with our friend who looks really good in her recent posts from the Maldives!

Laser and related technology will follow the lead of computers, smart phones, flat screen TVs and cars etc., and continue to become smaller, more efficient and cheaper.

Our first laser purchase was well over a decade ago. At the time it seemed to cost more than a small apartment, and was much the same size! I vividly remember the beads of sweat that formed when signing off on the machine finance, and again when overseeing the careful unpacking

and installing of the machine. It was like a scene from a Spielberg flick as we opened the glowing and mystical lost ark...

RAPID SCIENTIFIC ADVANCES MEAN THAT CROSS PROFESSIONAL COLLABORATION WILL BE ESSENTIAL

Purchasing such

expensive equipment was a leap of faith and at times we wondered if it would spell our financial ruin. A prominent dermatologist at the time looked at me as if I was mad and asked me if I seriously thought lasers would ever take off in Australia.

Time gives perspective. Looking back now, the positive aspect of the high cost is apparent. This motivated us to carefully consider which, if any, laser was best suited to the needs of our patient population. We researched the technology in great detail, took the time to meticulously test multiple devices on real patients over many months, considered safety and efficacy profiles and cross-matched these with our experiences.

The cost also motivated a high level of service delivery by the laser company. Multiple representatives attended our meetings, including the head scientist from overseas. The company happily proffered scientific and clinical papers from high level peer reviewed journals, and were pleased to lend us the laser to trial for several months to prove it's worth. Since acquiring the laser we have enjoyed a long term relationship with quick resolution of technical issues and mutual advice on treatment parameters for tricky cases.

Reduced costs mean lasers are now more accessible, and this is wonderful; we may all now offer our patients a broader range of treatments. Programmed treatment protocols also make for safer standardised treatments.

The things to watch for will be complacency in researching equipment, as lower cost may give the illusion of a reduced penalty for poor choices. An inferior device selection can still damage your reputation and shake your clients' confidence in you. Maintain your high standards and request evidence-based products with good post-purchase training and follow-up. Keep learning and be guided by your own unique experiences with your clients, and avoid cookie cutter treatment protocols. Be wary of 'It works for everything, has no down time or side effects, no consumables and will guarantee you millions!' type sales pitches.

The focus of effective treatments will drill ever deeper to the cellular and genetic level. Over time we have progressed from crude 'macro' surface treatments that stripped, buffed and surgically reshaped the skin and underlying anatomy, to precise targeted cellular and structural refinements through applied topical remedies, lasers, and other energy-based devices. Recently we have gained insight into growth factors and chemical mediators and are now exploring the frontier of gene targeted therapy. Soon we will possess the tools to re-write the genetic script for healthy skin and bodies. Stem cells, PRP, growth factors, DNA repair and anti-methylation agents are just the beginning.

Rapid scientific advances mean that cross professional collaboration will be essential. Professions can no longer remain locked away in self-reinforcing echo chambers of knowledge. Individuals who fail to develop networks and exchange knowledge freely with others are setting themselves up for isolation

and failure.

Our practice has evolved to a point of daily interaction with active sharing of ideas and skills between dermatologists, GPs, plastic surgeons, oculoplastic surgeons, RNs, dieticians,

naturopaths, beauty professionals and scientists. We are also benefitting from a culture where intergenerational teaching and learning is encouraged to flow in both directions.

Asia will continue to rise in the collective consciousness of the west. Health professionals must learn to reach across international as well as professional borders. In this, Australians can no longer be limited to reliance upon knowledge flows from the UK, Europe and the USA. We are well aware that economic powerhouses sit on our doorstep in the Asia Pacific region, and are quickly learning that the birthplace of many advances in dermatology and skin care is Asia. Combine this with the changing face of Australia's demographics - just sit and people watch for a while in Rundle, Hay, Queen, Pitt and Bourke Street Malls - and it is clear that we must increasingly look to Asia for advances in general dermatology and regarding skin conditions specific to Oriental, South East Asian, and darker skin types. It is also notable that excellent medical devices are being manufactured in Asia; most recently vascular laser, RF and IPL platforms.

Cosmetics and applied bio-active agents will continue to evolve. Once again many new ideas will emerge from Asia. Long renowned for their enviable and flawless skin, the Koreans and Japanese are finally sharing some of their secrets. BB creams were developed in Asia and have been mainstream for some time now. They are soon to be joined by their renowned clarifying serums and cosmetically appealing ultraviolet and visible light blockers.

Local producers are also devoting much effort to developing their own alternatives, including 'superfluid' sunscreens that will spread thin and widely without giving off an unpleasant shine. In future these will likely be combined with pigments that will produce the effect of a flawless foundation combined with high level UV and visible light protection.

We touched upon social media earlier. This reminds me of the need to steel ourselves against the rising tide of FOMO (fear of missing out) in the coming year. With many people's lives so enmeshed in social media which is awash with carefully curated profiles and 'look at me' selfie moments from others, it is easy for our patients to fall into the trap of feeling that the rest of the world is endlessly enjoying a 'fresher and more brilliant' life than themselves as they contend with life's various challenges; not to mention the

universal, yet at times painfully personal, experience of ageing.

Our role as health care and beauty professionals is to be aware of the changing social landscape and to offer a voice reason when required. We must remind our patients that looks are pleasing and a welcome luxury, but that life's true meaning is to be found in far bigger things than this.

It is equally important for us to realise we are subject to the same pressures, and to note our own advice. We too are exposed to the pressure to present well and happy each day, and are bathed in calculated marketing on a daily basis. Hard as it can be, hold on to and protect your sense of self. Resist being overly caught up in the exciting maelstrom of the cosmetic and beauty industry. Remember to be happy in your own practice, business and life in general. Be grateful for the people in your life, including your colleagues and patients. Be positive and perhaps reshape your view of 'competitors' to 'future collaborators' and people to exchange ideas with. Dermatology and the beauty industry are far from a zero sum game.

People and genuine caring will always remain at the core of everything we do. Technology is exciting, but, until the Terminator becomes a reality at least, it will not replace the warmth delivered by a kind gesture or caring hand. We cannot outsource our humanity and duty of care to machines. The patient is treated successfully or otherwise by you the human professional.



And to end with a final given: chances are a doctor will encourage you to sleep and eat well, wear sunscreen, have your skin checked and be kind to each other this year!

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