CURRICULUM VITAE

Jagdeep Nanchahal
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QUALIFICATIONS

1980 **B.Sc. in Anatomy with Basic Medical Sciences** (First Class Honours)
1982 **Ph.D.**
1985 **M.B.,B.S.**
1989 **F.R.C.S.** (England and Edinburgh)
1996 **F.R.C.S. (Plast)**
2002 **F.R.A.C.S.**

PREVIOUS POSTS

2006-2011 Professor of Hand, Plastic & Reconstructive Surgery, Imperial College, London
2002-2006 Associate Professor of Hand Surgery, University of Sydney
1995-2002 Senior Lecturer in Plastic and Reconstructive Surgery, Imperial College, London.

SUMMARY OF CAREER TO DATE

I undertook my initial research training towards my PhD as a medical student and subsequently specialised in reconstructive surgery of the upper and lower limbs. This background has enabled me to work successfully at the interface of basic science and the clinical problems encountered by surgeons to develop innovative therapeutics based on unraveling the molecular pathways to identify novel targets.

My initial research focussed on skin wound healing and scars. I subsequently investigated the pathobiology of rheumatoid arthritis. My current research projects on accelerating fracture healing and promoting bone formation and the mechanisms of contraction by Dupuytren's myofibroblasts, were prompted by my clinical observations of the pathological processes and the need for methodical study in the laboratory to address clinically important problems. By systematically studying the signaling pathways involved in the pathogenesis of Dupuytren's disease, my group has identified TNF as a novel therapeutic target and I am chief investigator for a trial funded by the Health Innovation Challenge Fund (Dept of Health + Wellcome Trust) to assess the efficacy of anti-TNF in patients with early Dupuytren's disease. I have secured over £40m in peer-reviewed grants as principal or co-applicant for my research projects.

I remain in clinical practice, with a specialist interest in treating patients with hand disorders and open fractures of the lower limb. I chaired the group that wrote the Standards for the Management of Open Fractures of the Lower Limb on behalf of the British Plastic and Orthopaedic Associations, published in 2009. These have been adopted by the NHS and compliance reported to TARN (Trauma Audit and Research Network) forms the basis of funding for these patients treated in major trauma or specialist centres. I am the only plastic surgeon on the NICE guidance development groups for non-complex and complex (including open) fractures. The guidance was published in February 2016.

I together with Michael Pearse set up the "One Stop Carpal Tunnel Clinic" where we assessed clinically and with nerve conduction studies over 40 patients and operate under local anaesthesia on more than 25 patients in a half-day session. This service was shortlisted for the 2010 Health Service Journal Award Quality & Productivity Category and outcomes published.

MANAGEMENT EXPERIENCE

2006 – 2010 Lead clinician in plastic & reconstructive surgery
2008 – 2011 Chief of Musculoskeletal Services (orthopaedics, rheumatology, plastic surgery, limb fitting)
2010 Mini MBA in health care management, Imperial College Business School

MEDICAL LEGAL

20 years' experience in preparing reports relating to personal injury and clinical negligence. Have also compiled reports for the Medical Protection Society regarding potential cases of negligence and provided advice to local NHS Trusts. I have lectured on several occasions at meetings organised by the AvMA and the Skeleton Series, 7 Bedford Row Chambers. I have particular interest in injuries to the hand, nerves, open fractures and scarring.
Fees: £300.00 per hour. Indicative fees for personal injury reports £600, clinical negligence £1,500-2,400.
Split of cases: claimant 60%, defendant 30%, joint 10%.

86 peer reviewed articles, 11 book chapters, including current Gray's Anatomy (2008), 95 research presentations and 200 invited lectures, including 7 keynote lectures.
Grant funding to date: £5.5m as principal investigator, £35m as co-applicant.

SELECTED PUBLICATIONS

Nanchahal J and Hinz B. (2016). Strategies to overcome the hurdles to treat fibrosis, a major unmet clinical need. *Proceedings of the National Academy of Sciences, USA*. 113(2): 7291-3

Masters J, **Nanchahal J**, Costa M (2016). Negative pressure wound therapy and orthopaedic trauma: where are we now? *Bone and Joint Journal* 98-B(8): 1011-3

Edwards AM, ….**Nanchahal J**… (2015) Preclinical target validation using patient-derived cells. *Nature Drug Discovery* 14(3): 149-50.

Chan J K-K, Glass GE, Ersek A, Freidin A, Williams GA, Gowers K, Espirito-Santo AI, Jeffrey R, Otto WR, Poulsom R, Feldmann M, Rankin SM, Horwood NJ, **Nanchahal J** (2015) Low dose TNF accelerates fracture repair in normal and osteoporotic bone through up-regulation of the innate immune response. *EMBO Molecular Medicine.* 7(5): 547-61.

Verjee LS, Verhoekx J, Chan J, Krausgruber T, Nicolaidou V, Izadi D, Davidson D, Feldmann M, Midwood KS, **Nanchahal J** (2013) Unraveling the signaling pathways promoting fibrosis in Dupuytren's disease reveals TNF as a novel therapeutic target*. Proceedings of the National Academy of Sciences, USA.* 110: E928-937.

Verhoekx J, Verjee LS, Izadi D, Chan J, Nicolaidou V, Davidson D, Midwood KS, **Nanchahal J** (2013) Isometric contraction of Dupuytren's myofibroblasts is inhibited by blocking intracellular connections. *Journal of Investigative Dermatology.* 133(12): 2664-71

Chan JK-K, Roth J, Oppenheim J, Tracey K, Vogl T, Feldmann M, Horwood N, **Nanchahal J** (2012) Alarmins: awaiting a clinical response. *Journal of Clinical Investigation*, 122(8): 2711-2719

Glass G, Chan J, Freidin A, Feldmann M, Horwood N, **Nanchahal J** (2011) TNF promotes fracture repair by augmenting the recruitment and differentiation of muscle-derived stromal cells. *Proceedings of the National Academy of Sciences, USA.* 108(4): 1585-1590.

Nanchahal J, Nayagam D, Khan U, Moran C, Barrett S, Sanderson F, Pallister I (2009) Standards for the management of open fractures of the lower limb. RSM Press
Written on behalf of the British Orthopaedic and Plastic Surgery Associations

Pearse M, **Nanchahal J**
Acute compartment syndrome: reducing the risk (2008) *Clinical Risk*, 14(3): 114-118

Miller M-C, **Nanchahal J**
Advances in the modulation of cutaneous wound healing and scarring. (2005). Invited review. *Biodrugs,* 19(6): 363-81.

Jain A, Brennan, F and **Nanchahal J.** Treating rheumatoid tenosynovitis with cytokine inhibitors. (2002). *Lancet*, 360: 1565-6

Pearse MF, Harry L, **Nanchahal J**
Compartment syndrome and fasciotomies for the lower limb. (2002) Invited editorial. *British Medical Journal*, 325: 557-8.

Nanchahal J, Davies DM.
Cultured composite skin grafts for burns. (1990) *British Medical Journal,* 301: 1342-1343. Invited leading article.

Nanchahal J, Otto WR, Dover R, Dhital SK.
Cultured composite skin grafts: biological skin equivalents permitting massive expansion. (1989) *Lancet,* ii: 191-193.

Blair SD, **Nanchahal J**, Backhouse CM, Harper R, McCollum CN.
Microscopic split skin grafts: a new technique for split skin graft expansion. (1987) *Lancet,* ii: 483-484.