

Alan Brook
University of Adelaide

Candidate Bio:

My career in Craniofacial Biology began as a student and that has remained the central focus of my academic and clinical life. This interest in craniofacial development, variation, and pathology influenced my choice of Pediatric Dentistry as a clinical specialty and has continued to shape my work as a clinical academic. Alongside developing strong clinical, teaching, and management portfolios, I have consistently advanced my research output, mentoring, and team leadership.

I have secured over \$8 million in research funding, earned a research Higher Doctorate (D.Sc.), and received six research prizes and seven Visiting Professorships. My output includes 33 keynote lectures, 244 full publications, 286 abstracts, editing four Special Issues, and supervising over 50 research higher degree students, including 21 Ph.Ds.

My substantial governance experience includes serving as President of a European Commission Dental Advisory Committee, Chair of the UK Council of Deans of Dental Schools, Dean of a Medical Faculty and two Dental Schools, leadership roles in three dental societies, and CEO of an industry–university research unit.

Having focused entirely on research for the past decade, I am eager to advance dental science globally by contributing to the effective functioning and strategic direction of the IADR Craniofacial Biology Group.

Candidate Statement:

I am committed to offering service and strategic input to the IADR Craniofacial Biology Group at this pivotal moment. Rapid intellectual and technological advances are transforming our field.

Applying the sciences of Complexity, Networking and Multi-Model thinking to craniofacial development and pathology can investigate dynamic developmental interactions occurring between genetic, epigenetic and environmental factors, while new molecular biology techniques enable their in-depth investigation.

Improved phenotype scanning is complemented by machine learning and customized software for automated placement of landmarks, measurement and geometric morphometrics. Enhanced data analysis explores interactions between these measured components of the craniofacial complex.

To promote the aims of our group we can seize these opportunities by encouraging International Multicenter Multidisciplinary Research Networks, which combine advanced methodologies with valuable clinical resources. Our future can be broadening collaborations to address our research questions more rapidly and in greater depth.