Prof Mauro Alini graduated in Chemistry from the University of Lausanne in 1983 and started his PhD research work on the isolation and characterization of proteoglycans extracted from both normal human mammary gland and carcinomas thereof. In September 1988, he joined the Joint Diseases laboratory at the Shriners Hospital in Montreal to work on extracellular matrix proteins of the growth plate during endochondral bone formation.

In January 1995, he was appointed as an Assistant Professor at the Division of Orthopedic Surgery of the McGill University and head of the Biochemistry Unit of the Orthopedic Research Laboratory, working to develop new biological approaches to treating intervertebral disc damage.

Since July 2000, and until 2019 he has overseen the Musculoskeletal Regeneration Program (now Regenerative Orthopaedics) at the AO Research Institute Davos (ARI), focusing on cartilage, bone, and intervertebral disc tissue engineering.

From 2020 he is the focus area leader of the newly formed research topic Sound Guided Tissue Regeneration.

From September 2009 he has also been the AO Research Institute Davos's Vice Director.

He received the Marshall R. Urist Award in 2015 from the Orthopedic Research Society (USA) for excellence in cutting-edge research in musculoskeletal regenerative medicine; and he gave the Ian Macnab lecture (Canadian Orthopaedic Association) in 2019. He is a Fellow of International Orthopaedic Research Society (FIOR), a Fellow of the Tissue Engineering Regenerative Medicine Society (FTERM) and a Fellow of the Orthopaedic Research Society (USA).

He has published over 300 papers, 14 book chapters, seven patents and has an h-Index of 82, with more than 20'000 citations.