

2009 SVP abstract, 69th Annual Meeting : FOSSIL VERTEBRATE RECONSTRUCTION FOR SCIENCE AND THE PUBLIC

FITZGERALD, Erin, University of Chicago, Chicago, IL, USA; SERENO, Paul, University of Chicago, Chicago, IL, USA; KEILLOR, Tyler, University of Chicago, Chicago, IL, USA; ABRACZINSKAS, Carol, University of Chicago, Chicago, IL, USA; MASEK, Robert, University of Chicago, Chicago, IL, USA

Bone, flesh and graphic reconstruction of vertebrate skulls and skeletons can be extended in new directions beyond the usual level of collaboration of scientist, lab technician, artist, web designer, and film-maker. The aim is to make the role and contribution of all of these participants more accessible and interesting to the public at the moment when new discoveries are presented. We take examples from our recent collaboration on several new dinosaurs and crocodylomorphs that will soon appear in papers and in the press. First, molding, casting and skull reconstruction are useful to the scientist in ways beyond mere reproduction. We show how we used a computed-tomography scan of a skull reconstruction to develop an effective skull cross-section when the preserved bones were disarticulated. Second, the steps involved in generating a skull and flesh reconstruction can be documented by time lapse. Third, skull reconstructions and flesh models ensure accuracy in computer graphics in film documentaries. Fourth, flexible flesh models that permit manipulation are useful for scientific observation and as an effective means to explain function. Fifth, coordinating a news release, a film and the launch of a rich, interactive public website created by a community-based organization offers a new model for providing a window onto science in action and what it means to make science accessible to the public.