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**Connecting art and science to determine climate change effects on sea turtle nesting and oceanic distributions**

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We illustrate how digital 3D art has been used to create virtual lean and fat animated animals that can be inserted into computational fluid dynamics to obtain drag and heat transfer properties, then those results can be inserted into Niche Mapper™ to compute energetics, behavior and distributions on land and at sea for current and future climate scenarios. Tests of the virtual computational models against physical models in the laboratory and field will be described.