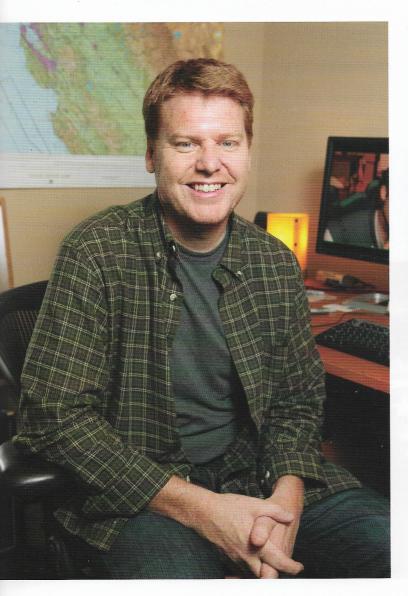
## JOHN KAHRS

**DISNEY ANIMATOR** BRINGS *TANGLED* TO LIFE IN 3D



BY JUDY SECKLER

How to describe stereoscopic 3D? Disney animator John Kahrs, who worked on *Tangled*, observed, "the screen is a proscenium that you're looking through."

Likewise, the characters are designed like "puppets in the computer" with directors making decisions every step of the way to determine which objects push forward. It's an exercise in subtlety and sophistication that bears little relation to the cheesy 3D films of the 1950s. For instance, the team chose to have hundreds of lanterns pop out to add drama to Tangled's lantern sequence.

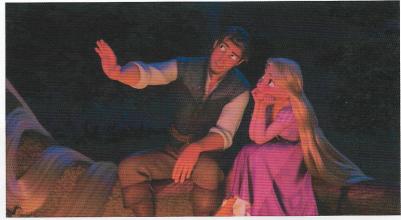
Kahrs related that Walt Disney had *Rapunzel*, a Grimm's fairytale, on a short list of projects he wanted to do 70 years ago. Producer Glen Keane set the bar for *Tangled* by doing a rough pencil test of the Rapunzel character that was "electrifying" and caused a "ripple effect"

each character's facial movements, and keep everyone on schedule.

Disney Chief Creative Officer
John Lasseter's mandate on
every animated film is to push
the technology, and this film was
no different. In past animated
features, female characters were
given shorter hairstyles. This
had as much to do with the limits
imposed by the software as it had
to do with a character's identity.

The "huge challenge" of the film was to create hair that was 70 feet long that could be thrown, grabbed, pulled and seen wet. The team triumphed, with a tremendous amount of trial and error along the way.

Kahrs' first foray in to animation began with drawing and making flipbooks. Later, he was dazzled by *Luxo Jr.*, Lasseter's groundbreaking animated short that featured a hopping desk lamp and



throughout the studio. "It told us what to shoot for," remembers Kahrs.

The process begins with a great script, says Kahrs. From there, animators set about designing each character's personality, what they were thinking and living, as well as the environments in which they move in. Kahrs' role was to supervise the riggers, the artists who design the skeletal structures and the controls for

his adventures playing with an inflated beach ball. The desk lamp became the Pixar logo.

"I was blown away from the first," Kahrs says. "The animated object had a specific personality. The appeal came from the subtlety in the movement."

(Pictured): Top, Disney Animator John Kahrs in his studio office. Bottom, Tangled, Flynn Rider impresses Rapunzel in her tower with stories about the outside world.