

Disney • PIXAR  
**MONSTERS**  
**UNIVERSITY**

**"I don't mean to get emotional, but everything in my life has led to this moment. Let it not be just the beginning of my dream, but the beginning of all of your dreams."**

*~ Mike Wazowski, "Monsters University"*

Ever since college-bound Mike Wazowski (voice of Billy Crystal) was a little monster, he has dreamed of becoming a professional Scarer—and he knows better than anyone that the best Scarers come from Monsters University (MU). But during his first semester at MU, Mike's plans are derailed when he crosses paths with hotshot MU legacy James P. Sullivan, "Sulley" (voice of John Goodman), a natural-born Scarer. The pair's out-of-control competitive spirit gets them both kicked out of the University's elite Scare Program. To make matters worse, they realize they will have to work together, along with an odd bunch of misfit monsters, if they ever hope to make things right.

Screaming with laughter and oozing with heart, Disney•Pixar's "Monsters University" is directed by Dan Scanlon ("Cars," "Mater and the Ghostlight," "Tracy"), produced by Kori Rae ("Up," "The Incredibles," "Monsters, Inc.") and executive produced by John Lasseter. The story and screenplay are by Daniel Gerson & Robert L. Baird ("Monsters, Inc.") and Scanlon.

"Monsters University" also features the voices of Steve Buscemi ("Boardwalk Empire") as Randy Boggs, Helen Mirren ("Hitchcock," "The Queen") as Dean Hardscrabble, Alfred Molina (TNT's "Monday Mornings," "The Da Vinci Code," "Frida") as Professor Knight, Dave Foley (TV's "NewsRadio," "The Kids in the Hall") as Terry Perry, Sean P. Hayes ("The Three Stooges," TV's "Up All Night") as Terri Perry, Joel Murray (TV's "Mad Men," "Two and a Half Men") as Don Carlton, Pixar's Peter Sohn ("Ratatouille," "Small Fry") as Scott "Squishy" Squibbles, and Charlie Day ("Horrible Bosses," "Pacific Rim," TV's "It's Always Sunny in Philadelphia") as Art.

The voice cast also includes Nathan Fillion ("Much Ado About Nothing," "Percy Jackson: Sea of Monsters," TV's "Castle") as Johnny Worthington, Bobby Moynihan (NBC's "Saturday Night Live," HBO's "Girls," DreamWorks Studios' "Delivery Man") as Chet Alexander, Julia Sweeney (TV's "The Goode Family," "Saturday Night Live") as Ms. Squibbles, Aubrey Plaza ("To Do List," TV's "Parks and Recreation") as Claire Wheeler, Tyler Labine ("Tucker & Dale vs. Evil," "Mad Love") as Brock Pearson, John Krasinski ("Promised Land," TV's "The Office") as "Frightening" Frank McCay, Bonnie Hunt (TV's "The Bonnie Hunt Show," "Cheaper by the Dozen") as young Mike Wazowski's grade school teacher Karen Graves, Beth Behrs (TV's "2 Broke Girls") serves as Carrie

Williams, and John Ratzenberger (“Cheers,” Disney•Pixar’s feature films) returns to the Pixar recording studio as the voice of a Monsters, Inc. employee.

With music from Rock and Roll Hall of Fame inductee and award-winning composer Randy Newman (“Monsters, Inc.,” “Toy Story 3”), Axwell & Sebastian Ingrosso from Swedish House Mafia and Mastodon, “Monsters University” opens in U.S. theaters on June 21, 2013, and will be shown in 3D in select theaters. The film is rated G by the MPAA.

## **WELCOME TO “MU”** **Story Team Takes Characters Back in Time**

“We wanted ‘MU’ to be Mike’s story,” says director Dan Scanlon. “His drive and sincerity are so compelling—his quest so personal.”

From the beginning, Scanlon was drawn to the idea of self-discovery. “Setting the story at the time when Mike is first venturing into the world by himself allowed us to delve into his journey of self-awareness, experiencing with him the fun, the ups and downs, the friendships and the revelations that come with growing up. It’s during these years, whether in college or not, that we tend to learn who we are. And it’s not necessarily who we thought we were.”

“Mike is self-assured, unwavering in his convictions,” says producer Kori Rae. “But Mike’s dream—unlike Mike—is outsized. It never occurs to him that he might not realize his goal. But we don’t always get what we want, including life-long dreams. It’s perhaps the hardest lesson for any of us to face, but it’s the benchmark of maturity.”

## **WHEN ONE DOOR CLOSSES, ANOTHER ONE OPENS**

Pete Docter, director of “Monsters, Inc.,” played a key role in developing major themes in “Monsters University.” “One theme that came out really early was this idea that when one door closes, another door opens,” says Docter. “Doors were so central to the first film visually, so this idea really stood out. We realized that the main message in so many movies—especially those for kids—is, ‘If you try hard enough and believe in yourself, you can do anything!’ And that’s not a bad message, but it’s not always truthful. What do you do when your dream is crushed?”

According to the filmmakers, Mike’s story—and the fact that he doesn’t accomplish what he sets out to do—not only makes the story more interesting, it makes it more relatable. “A big part of this film is facing reality,” says story supervisor Kelsey Mann. “Sometimes it’s harsh and unfair, but that’s okay. It just means you were meant to do something else, something that ultimately might be more rewarding.”

Lasseter agrees. “College is the time when we all have so much optimism and confidence that we can change the world. We have dreams and goals. We’re unstoppable. And then reality sets in and we start hitting closed doors. It’s what you do

when you hit a closed door—it's what you do when your dream is shattered that really formulates who you are."

Scanlon believes the key to figuring these issues out is often revealed through the relationships we form. "No matter how hard we try, we can't do it alone. Nobody can. So we turn to others—and they turn to us—and we really start working on what we're going to be. It really does take a village, I think. The tricky part is putting together the right team."

But that's not always easy, as Mike learns. James P. Sullivan, Mike's nemesis-turned-teammate, isn't yet the big teddy bear of a monster who will one day reign at Monsters, Inc. From the moment he steps foot on MU's campus, Sulley's full of attitude and bravado—he just wants to have fun. As a natural-born Scarer, Sulley figures he doesn't have to try that hard to succeed. "His lackadaisical nature really gets under Mike's skin," says screenwriter Daniel Gerson. "It just makes Mike nuts that Sulley doesn't respect the opportunity enough to work hard—or at all."

Adds screenwriter Robert L. Baird, "And it makes Sulley crazy that this little lime-green ball of determination is excelling in class, actually out-Scaring him, a monster who was born to Scare. He starts to doubt himself, which just fuels the competition between them."

"When it all goes south, it's not pretty," says Rae. "They get kicked out of the Scare Program by the Dean herself; their dreams are crushed. But as fate would have it, they're forced to work together to make things right. The unlikely bonds they form with a group of misfits, and how they grow—individually and as friends—results in a very funny, very touching story that at its heart is completely relatable to people of almost every age."

Of course, things don't work out exactly like they want. Maybe—just maybe—says Mann, they work out better, showcasing exactly why Mike and Sulley were always meant to be friends. "Mike is really good at lifting others up. In his quest for this unattainable dream, he becomes a great coach, making Sulley a hundred times better than he is on his own. They're really a team and we get to see how that happens."

## **BACK IN TIME**

Ever since "Monsters, Inc." opened in theaters on Nov. 2, 2001, the team at Pixar Animation Studios knew that Mike, Sulley and the monster world had touched audiences worldwide in a significant way. So the idea of bringing them back to the big screen was a welcome one. How to do it, exactly, was another story—literally.

Says executive producer John Lasseter, "When we create an original film at Pixar, by the time we're done with it, we know the characters—they're like friends; they're like family; they're part of us. It's always bittersweet to say goodbye to characters like that. It's so much fun to start thinking of new ideas that you can do in a world you already love, but we had to come up with a story that is as good or better than the original."

To fuel Pixar Animation Studios' well known collaborative process, the creative leadership team, dubbed "the brain trust," hosted a brainstorming session, inviting some of Pixar's best storytellers, including several members of the original "Monsters, Inc." team. The idea of doing a prequel was certainly appealing to this group. Imagining the backstory for Mike and Sulley—a natural part of the filmmaking process—had been happening since the original film was made.

But filmmakers were well aware of the challenges surrounding prequels. Says Baird, "When the idea came up, we said, 'Okay, let's go back through movie history and study all the great prequels.' Then we realized we couldn't think of any."

Explains Scanlon, "One of the challenges with a prequel is that by definition, everyone knows how the story ends. So it can be difficult to uncover the drama because we already know everything's going to work out. It's hard to define those stakes. You have to learn something new about the characters—which we ultimately do in 'MU.' We had to push the drama far enough that it almost threatened the way people felt about these characters, while ensuring that when the movie ends, we actually do the opposite by bringing the audience even closer to Mike and Sulley."

Adds Rae. "It can be insanely difficult to make a prequel that isn't predictable—to create a story with unexpected twists and turns and surprising character arcs. But the storytellers really dug deep and developed details about these characters to make a fun, yet emotional plot that audiences will never see coming."

According to Mann, knowing how the story ends actually presented filmmakers with some exciting opportunities. "You may know where they're going to end up," says Mann, "but you don't know how they got there. So it's the journey that really matters, an idea that ultimately underscores the whole movie."

Scanlon agrees. "The whole filmmaking process mirrors the path our characters take in this movie. It's not a straight line from beginning to end—but one filled with dips and peaks, left turns and a lot of rerouting. But—like Mike's story—it all works out exactly like it should."

The director tips his hat to his Pixar team. "The collaborative environment here is unique and extremely valuable. I get feedback from some of the most talented people in the industry. I'm not expected to incorporate all of it—or any of it—but I'm better because of it. And so is the film. You better believe I relate to Mike and Sulley's story."

Their journey isn't easy, to be sure, but according to Scanlon—it's an adventure. "It's a college movie, a coming-of-age story, so we wanted it to be really fun and capture that experience of self-discovery. We're definitely going for laughs, but also an emotional story that's relatable. The most important thing for us is to tell a story that makes people feel good. Maybe someone's just had some failure in life or feels like a big dream has fallen apart. That person might walk out of the theater feeling that there's hope—that it happens to everyone. Their dream might have to change course, but it's not the end of the world."

## **MAKING MONSTERS**

### **“Monsters University” Enrollment Roars**

While filmmakers were certainly able to hit the ground running when it came to creating their cast of characters for “Monsters University”—they had three key returning characters and a blueprint for the monster world from “Monsters, Inc.—they still had their work cut out for them. “We had to take Mike and Sulley back in time,” says director Dan Scanlon. “We had to make them younger—college age—how do you do that with monsters?”

The question proved challenging for Scanlon and the production team. Artists pulled reference of some A-list actors with long careers to compare images of them at different ages. For Mike, they studied how frogs age to determine what he would look like in a younger incarnation. Then Nierva, character art director Jason Deamer and several members of the production team applied the knowledge they’d garnered in their efforts to create younger versions of Mike and Sulley. “We made them thinner, shortened their horns, removed age lines and made their eyes brighter and colors more saturated,” says Deamer. “We made a bunch of subtle moves and were pleased at how different they looked standing next to the older versions. We thought the cumulative effect was huge. But it wasn’t enough—a slightly skinnier green ball with one eye was still just that. When you extract the essence of someone’s likeness, whatever those basic elements are, that’s what you remember ten years after seeing a movie.”

So the team gave each of the returning characters what they called a “visual hook.” For Mike, artists added braces for the grade school version, which graduated to a retainer by the time he landed on the Monsters University campus. Sulley was adorned with an unruly tuft of teenage hair, reflecting his laidback attitude. Randall—known as Randy in “Monsters University”—dons a pair of glasses, which tend to get in the way of his not-yet-signature disappearing act.

All of the characters—both old and new—were treated with Pixar’s signature innovative spirit, creating a memorable cast that’s ultimately brought to life by a talented roster of voice talent led by Billy Crystal and John Goodman. “Those guys were great,” says Scanlon. “We recorded them individually early on in the process—just to get them back into the groove of the characters and for everyone to find the slightly younger versions of Mike and Sulley. But when we got them together, it was wonderful. They really get along, and have a natural charisma together. It was great for me as a director to just set up the basic idea of the scene and let them run with it. I’d stand back and watch, making little changes here and there. The energy level was high. Recording them together really allowed for the kind of happy accidents that you don’t often find in animation—those great spontaneous moments.”

Adds producer Kori Rae, “We were so lucky to assemble a cast like this. They have this uncanny blend of raw talent and experience—and pure unbridled excitement for the project—that makes a movie like this really take off.”

Another big dilemma for filmmakers was technology—specifically how technology now afforded them luxuries they didn't have with "Monsters, Inc." "Fur was a technical challenge for the first film," says Nierva, who worked on the first movie. "We were allowed one furry character per scene. We've come a long way since then and in 'Monsters University,' we can put furry characters everywhere. So we did. But then [director] Dan [Scanlon] had to reign it all in because the world had changed too much from that of the first film—so some monsters lost their fur along the way."

According to Nierva, there are 500 characters in "Monsters University"—averaging more than 25 characters per shot, which is more than double the number in previous Pixar films. Artists designed and modeled many of the more than 400 background characters early in the production timeline, while the story team hammered out the details of Mike and Sulley's college adventure.

## WHO'S WHO AT MU

MIKE WAZOWSKI's lifelong dream is to become a Scarer at Monsters, Inc.—and he's sure he knows just how to do it. Ever since he was a young monster, Mike's had his eye on Monsters University, home of the monster world's top Scare Program. Now a freshman and hopeful Scare student, he's well versed in the rich history, theory and technique required to reach his goal, and the little green one-eyed monster has more confidence, enthusiasm, determination and heart than all of his classmates combined. Then he meets James P. Sullivan—Sulley—and life gets tricky. "He gets little guy's disease bad," says Crystal, who returns to Pixar's recording studios, giving voice, humor and a heightened level of emotion to Mike. "He has a chip on his shoulder when it comes to Sulley—this big handsome monster who's everything Mike really wants to be."

The problem, of course, is that Sulley fails to nurture his natural abilities, while Mike works extra hard—to little avail. "This movie does something that is rarely done," says Scanlon. "It shows someone who has a dream and a desire that doesn't work out the way he expects it to. I think that happens to everyone in some way or another, so we really wanted this movie to show that sometimes when you reach those walls, there's something better around the corner. It's not the end of the world. Mike Wazowski is the perfect guy to tell that story."

Crystal says that for monsters, the characters are surprisingly human. "It's easy to think that these characters can't possibly have any depth or feelings because they're monsters, but they do," says Crystal. "They're young men figuring out who they are and what they want in life—and then what life actually has in store for them. What's great about these movies is that they don't just entertain, they also have a wonderful message."

And going back in time is sort of a bonus, adds the actor. "Suddenly, we're 18 years old. They made us look younger and thinner. I wish life could work that way."

When it comes to Scaring, SULLEY's a natural—his abundant size, fierce roar and family legacy of a long line of high-achieving Scarers make him a shoo-in for the



esteemed Scare Program at Monsters University. “We all know who Sulley becomes,” says Scanlon. “Sulley was humble, sweet and mature in ‘Monsters, Inc.’—we had fun playing him against character in ‘Monsters University.’ He’s a very talented Scarer—a big guy, an athlete. He looks the part and he knows it. He shows off a little and he might be a little arrogant.”

But from the moment the overly confident monster steps his big furry feet on campus, it’s clear he’d rather crack jokes than books—and he learns the hard way that his unfettered talent and family ties can only get him so far. An ill-timed spar with a little green know-it-all gets him kicked out of the Scare Program. With his ego bruised and future in jeopardy, a stubborn Sulley must put his pride aside, team up with an odd bunch of misfit monsters and actually work if he wants to live up to his true Scaring potential.

According to filmmakers, the character—who weighs in at 985 pounds—went through a bevy of changes before they landed on the right mix of confidence and likability. Fortunately, they had the right guy in place to help bring the complex character to life. Says Rae, “John Goodman—the hardest-working man in show business—returned to voice Sulley and is absolutely great.”

Goodman was excited to revisit the role, but says he had concerns about taking the beloved character back in time. “I worried about finding a higher register for his voice, but it just took care of itself,” says the actor. “I’d come in and read a few lines and we’d go on to do the rest of the script. But we’d always come back and get the original lines at the end because by then the character had found itself.”

Monsters University freshman RANDY BOGGS has big aspirations for college life. The peculiar lizard-like monster with his host of gangly arms and legs plans to major in Scaring and lead an active social life filled with fun, friends and fraternity parties. “He’s not the Randall that we know from ‘Monsters, Inc.,’” says Steve Buscemi, who once again provides the voice of the iconic character. “He’s a little insecure and he wants to fit in, so he works toward pledging the coolest fraternity.”

Story supervisor Kelsey Mann says he thinks audiences will be surprised to see Randall’s humble beginnings. “He’s super happy and positive. And, just like Mike, he’s always dreamed of becoming a Scarer.”

He certainly seeks inspiration. One of Randall’s most memorable lines from “Monsters, Inc.” finds its way into the prequel. Hanging above Randy’s bed is an inspirational poster that reads “Winds of Change.”

Audiences will get the inside scoop on just what sparks Randy’s competitive spirit—but the future top Scarer at Monsters, Inc. will first need to get his embarrassing disappearing habit under control, because Randy’s not sure how he’ll ever be a great Scarer if nobody can see him.

## CUE THE MISFITS

The Oozma Kappa fraternity characters sprung from an impromptu and lively lunch among filmmakers. “We wanted to design each of the Oozma Kappas around a story point or a characteristic that would mirror what Mike and Sulley were going through,” says Scanlon.

Faced with the realities of the economic downturn, Midwestern sales monster DON CARLTON finds himself going back to school to learn new skills and pursue a dream career in Scaring. “Don is personally one of my favorite characters,” says Scanlon. “I love the idea that it’s never too late—which is so inspiring—it’s never too late to change what you want to do and try something different. He’s done something that he wasn’t excited about for years. I love the idea that Don gets a second chance to do something he really loves.”

One of Monsters University’s “mature” students and a founding member of the Oozma Kappa fraternity, Don brings his honest, hardworking spirit to their endeavors, ensuring that his fellow brothers keep their various heads on straight and their array of eyes on the task at hands.

Joel Murray was called on to bring the mature student to life. “I think that was brilliant casting for Don,” says Rae. “He’s really funny, but Joel has an innocent sweetness in a lot of his characters, which comes through in Don.”

SCOTT “SQUISHY” SQUIBBLES gives new meaning to the term undeclared. Says Scanlon, “His design is literally like a piece of clay that needs to be molded. We intentionally designed Squishy to be smaller and cuter than Mike to illustrate that it’s not appearance that makes a Scarer—it’s something far more elusive.”

A sophomore whose dream of becoming a Scarer was squashed in his first year at Monsters University, Squishy is a bit of a wide-eyed wanderer—small, sweet, naïve and quiet—who, not surprisingly, still lives with his doting mother. But with a little help from his Oozma Kappa brothers, Squishy begins to realize he’s more than just that shy monster in the corner.

Pixar’s own Pete Sohn stepped in as the voice of Squishy. “He did the scratch early on and it totally stuck,” says Rae. “Pete’s an amazing actor who’s been in a few of our films—he makes the perfect Squishy. For me, the character is the heart of the film.”

The ultimate free spirit, ART is a mysterious monster with a dubious background. “Art was a big question mark,” says Scanlon. “We couldn’t quite figure out who he was and in not figuring him out, we found him.”

By far the strangest member of the Oozma Kappas, Art bowls over the competition—sometimes literally—with his unique dexterity and wild-card ways. Nothing is scarier than the unpredictable, especially when it comes to this furry ball of bad.



Adds Scanlon, “He’s just the weird guy you don’t know anything about—and there are a lot of those in college. He ended up being one of our favorite characters because he could be so bizarre. His design matches that, too: odd.”

Odd, indeed: Art is rainbow shaped with long, curved legs and arms that originate from a seemingly impossible place. “I think the second we arrived at that design, everybody knew it was going to be great,” says character art director Jason Deamer. “Then animation got a hold of him and started bending him every which way. We hope he’s going to be a stand-out character.”

Charlie Day was called on to help bring Art to life. “He definitely rolls to the beat of his own drum,” says Day. “But Art has a big heart—and it’s somewhere between his eyeballs and his legs.”

When it comes to TERRI & TERRY PERRY, it’s hard not to ask, “Are two heads really better than one?” Says Scanlon, “Terri and Terry are these two bickering characters that mirror the relationship Mike and Sulley have in the beginning. They’re literally stuck with each other, but can’t quite work together.”

They’ve little in common—Terri with an “i” is a real romantic who’s quick to spot the silver lining in any situation, while older brother Terry with a “y” sports a more cynical outlook on life. “They have to learn to become one—the same way that Mike and Sulley do,” says Scanlon.

If they can stop squabbling long enough to work with their Oozma Kappa brothers—they might be able to put their heads together—literally—and find their place in Monsters University’s Scare Program once and for all.

Sean P. Hayes gives voice to Terri, while Dave Foley is the voice behind Terry. The duo recorded together, which led to some serious improvising. Says Hayes, “We always have fun improvising and coming up with new things, but it’s always within what’s already written.”

Adds Foley, “Dan Scanlon shaped whatever we improvised, and if we came up with something he sort of liked, he then guided it toward something he actually liked.”

## IN CHARGE

To DEAN HARDSCRABBLE, there are scary monsters and there are all other monsters. It’s no surprise she feels this way—she is, after all, a legendary Scarer and Dean of the School of Scaring at Monsters University. Aspiring Scare students must be up for the challenge to impress her, though she is convinced that her assessments of who is truly scary are never wrong.

“Hardscrabble has been arguably the hardest character that I’ve ever worked on in the 15 years I’ve been here,” says character art director Jason Deamer. “We had as many

as 12 people working on her. She had to be terrifying and creepy, but at the same time beautiful and graceful.”

Filmmakers recruited a rare centipede for inspiration—*Scolopendra Gigantea*, also known as the Amazonian giant centipede. “We didn’t want her to be just a pure centipede,” says production designer Ricky Nierva, “so we thought having a dragon-, bat-wing motif would be cool. She can get from point A to point B really quickly, and her wings provide great opportunities to illustrate her emotions—when she gets angry, she can unfurl them quickly.”

With 30 legs, spectacular wings and a lifetime of experience, Dean Hardscrabble knows Scaring. She has no use for mediocrity—and her students know it. So when the hard-to-please Dean witnesses the spectacular culmination of the rivalry between Mike and Sulley, she takes swift action, dashing their dreams in an instant.

Unlike Hardscrabble, Helen Mirren, who lends her voice to the character, appreciates Mike Wazowski’s work ethic. “Following your dream is all very well, but without the hard work it’s nothing. I think too many people think all you have to do is just have a dream and it will happen, and this movie very adroitly and very elegantly teaches a lesson to young people—success is 10 percent inspiration and 90 percent sweat and hard work. And even then, there are no guarantees.”

PROFESSOR KNIGHT teaches Scaring 101, the introductory course to Scaring at Monsters University. With hundreds of new Scare students each year, Professor Knight must weed out the weak from the talented and identify who shows the most potential to be real Scarers. Only a few have what it takes to pass the formidable final exam and move on to the elite Scaring Program.

Alfred Molina was tapped to bring the esteemed teacher to life. “Professor Knight is a cross between a football coach and a drill sergeant,” says Molina. “He expects a lot of his students and he’ll put them through their paces—but he’s demanding because he really wants to see them do well.”

MS. SQUIBBLES is a doting, single parent who encourages, accommodates, and more so, coddles her only son, Scott “Squishy” Squibbles. Squishy is 19 years old and still lives at home, but who can blame him? Ms. Squibbles is Monstropolis’ best mom—she cooks for him, does his laundry and she even acts as house mom when he has his “little friends” over to play fraternity.

The filmmakers called on Julia Sweeney to give voice to the delightful mom. “Sherri Squibbles has five eyes, three eyebrows and a very thick neck,” says Sweeney. “She’s a round lady who’s usually wearing curlers, and she’s completely oblivious to the fact that she might be embarrassing her son in front of his friends—but they can’t say anything because they’re in her house. I love that it’s all great mom stuff.”

## **STUDENT BODIES**

JOHNNY WORTHINGTON has reason to be supremely confident—he's the top Scare student at Monsters University and president of the best fraternity on campus, Roar Omega Roar (ROR). Voiced by Nathan Fillion, Johnny comes from a long line of MU Scarers and respects the school's legacy, traditions and most of all, the system by which Scaring excellence is judged. He may have been born with a silver spoon in his jaws, but this monster's no softy.

Says Fillion, "One of the themes in this movie is seeing a person's hidden value—a skill Johnny certainly lacks. He takes people at face value, and he'll never know them. That's a hurdle Mike and Sully have to overcome with one another."

Aubrey Plaza provides the voice of CLAIRE WHEELER, who is the Greek Council president at Monsters University, and this year she is one of the chosen emcees for the school's annual Scare Games. Don't be fooled by Claire's brooding exterior and monotone drawl—while banal in appearance, on the inside she is a galvanizing force of school spirit who diligently warns the Scare Game participants of the dangers they will face.

BROCK PEARSON, voiced by Tyler Labine, is a preppy-looking fraternity monster chosen to assist the Greek Council president in emceeing the school's annual Scare Games. Jock-like and what some might refer to as a "meathead," Brock is a loud, enthusiastic emcee who relishes the danger of the Scare Games' challenges.

Bobby Moynihan lends his voice to CHET ALEXANDER, an overzealous sidekick to ROR president Johnny Worthington. He's enthusiastic, excitable and in 100 percent agreement with whatever Johnny says. If Johnny wants someone mocked, Chet is first in line to mock them. If Johnny wants to get a laugh, Chet will be in hysterics before the joke is done. And if Johnny wants Chet to stop smothering him, well then Chet will try his best to do that, too.

Fearless leader of the Python Nu Kappa (PNK) sorority, CARRIE WILLAMS commands the respect and attention of the house with a simple flash of her burning red eyes. The youngest of eight siblings and the only girl, Carrie relishes being in a sorority and the relationships with her PNK sisters. Beth Behrs was called on to provide the voice of Carrie.

## **FRATERNITIES, SORORITIES AND MASCOTS**

A collection of wholesome, good-natured misfits, the adorable brothers of OOOZMA KAPPA (OK) have bonded over their inability to make it through the Scaring Program. With only four bodies in the house, they don't even have enough members to compete in the Scare Games. What they lack in scariness and self-confidence, they make up for in heart.

The ROAR OMEGA ROAR (ROR) fraternity is made up of the best of the best. They're the smartest, most skilled, scariest monsters at Monsters University, and come from families with a long, proud history of Scaring. While the RORs may be preppy in dress, they are ferocious in action and downright ruthless, if necessary. Self-declared as the most elite house on campus, the RORs are lead by Johnny Worthington who presides over the house like an all-powerful monarch. Eager to continue their Scare Games winning streak, the RORs will do whatever it takes to stay on top.

Pretty in pink, the sisters of PYTHON NU KAPPA (PNK) are not to be underestimated. Led by their fearless queen bee Carrie, these ladies are smart, cold-hearted and merciless. Covered in pink from head to toe, the PNKs' sweet exterior quickly turns terrifying when the Scare Games begin.

Big on brawn but short on brainpower, the JAWS THETA CHI (JOX) fraternity brothers are rarely seen without their flashy letterman jackets. The JOX are brutal competitors who never hesitate to do whatever it takes to beat their opponent, even if it's breaking the rules. Despite practically living at the gym or on the field, these sports-loving monsters often prove that bigger doesn't always mean better when it comes to Scaring.

The athletic sisters of SLUGMA SLUGMA KAPPA (EEK) spend most of their days working out and running drills to perfect their Scaring skills. Their initiation is a triathlon, and training together 24/7 has strengthened the bonds of sisterhood so much so that these strong, self-assured girls are ready to out-work and out-scare any monster they encounter together.

ETA HISS HISS (HSS) sorority has been around since the beginning of Monsters University and the members are as mysterious as they are terrifying. The HSS sisters might be pale, mysterious and sullen, but these intimidating Goth girls are fierce competitors and tough as nails. Fittingly, their most distinguished alumna is one of the most powerful, Scary monsters on campus who every new Scare student strives to impress—Dean Hardscrabble.

ARCHIE THE SCARE PIG, the squealing mascot of Monsters University's rival school, Fear Tech, becomes the unsuspecting target of an MU prank when he's secretly swiped. But Archie is no boneless ham; he can take care of himself, and his fast feet and feisty nature keep his hijackers in hot pursuit.

**DOING THEIR HOMEWORK**  
**Filmmakers Travel Coast-to-Coast—and Enlist Some  
Cool Creatures—to Make Movie Roar**

Research is one of the keys to Pixar Animation Studios' success. "For every movie we do, authenticity is absolutely vital," says executive producer John Lasseter. "Our teams traveled to Scotland for 'Brave,' and for 'Finding Nemo,' everyone became certified scuba divers. 'Monsters University' was fun to research because it takes place in a college setting—I have five sons and three of them are in college right now. I've been able to pick their brains. I'd go and move one of my sons into college, bringing all these ideas and observations back to the next story meeting."

## BACK TO SCHOOL

Director Dan Scanlon, like a lot of members of the production team, graduated from art school. "We didn't quite have that experience as far as the look of a classic campus—so we went to several schools to soak up the atmosphere. Just seeing the students—so young and so stressed—most of us were glad to be done with that phase of our lives. But we also got the distinct feeling that anything's possible. There are so many opportunities and areas to study—we saw all these different schools within each college, which definitely got us all charged up imagining what a monster college could be."

Producer Kori Rae took part in the team's quest for knowledge and inspiration as the story was just getting off the ground. "Our first research trip was to the east coast to visit a number of schools, including Harvard and MIT," says Rae. "It was a blast. The first day of our visit, we were amazed—just blown away by the scale of the campuses and all the activity—saying, 'Are you kidding me?' We visited classrooms, listened in on lectures—everyone really got into it."

Artists were inspired by the campuses they visited. "In 'Monsters, Inc.,'" says production designer Ricky Nierva, "they took the best of American manufacturing and translated it into a monster world. When we went and looked at all these colleges, we wanted to feel the spirit of the university so we could similarly translate that into our monster world."

"We realized that there's a lot of history—particularly at a campus that still has buildings from when the school was founded," continues Nierva. "There's history in the way the buildings were designed and the way they were built. We could see how each campus evolved as time went by—there were really old buildings next to really new buildings. We learned how the oldest—often the most ornate—building on campus was where the university started—typically surrounded by big, really mature trees—with the rest of the campus expanding from there."

According to Nierva, the team paid attention to the details—ultimately incorporating much of what they observed into the film. "We learned about the walking patterns of the students, which we found fascinating. There were pathways snaking through the Quad on one campus that seemed random. We realized that many of the paths had been left by students who had to get from point A to point B as quickly as they could between classes, so they would cut across the lawn in lieu of the original paved paths, killing the grass. Eventually, groundskeepers just paved the short cuts because they didn't want to keep reseeding the grass."

As a result of their observations, artists made the School of Scaring the oldest building on the Monsters University campus, complete with big, mature trees, worn pathways that connected paved ones and a bevy of monsters to put it all to good use. Filmmakers even borrowed a tradition from one of the schools they visited: Students who enter the School of Scaring on their first day of school touch a statue's toe for good luck.

But there's more to college life than buildings, pathways and statues. The team visited schools in their own backyard, including Stanford and UC Berkeley, and checked out some of the more entertaining aspects of student life. Says Nierva, "Some of the schools felt much more open—people throwing Frisbees around on the grass and laying out. We loved going to the fraternity houses. The fraternities were very open to letting us into their places—we took a lot of photos.."

Some members of the production team attended a bonfire event at UC Berkeley prior to a big football game against Stanford. The experience served as great reference for the MU-Fear Tech rivalry.

## BUGGED

The team's research extended beyond the college scene, especially when it came to Dean Hardscrabble's design. Artists studied owls and moths, among other things, but it took a visit with a particularly creepy creature to trigger her ultimate design.

Owen Maercks of East Bay Vivarium was invited to Pixar Animation Studios to introduce the production team to an Amazonian giant centipede—*Scolopendra Gigantea*—which can reach 12 inches in length. "This creature was so creepy," says Nierva. "Mr. Maercks told us that he deals with super-venomous snakes, lizards and spiders, yet he said that he would not mess around with this centipede. He had long leather gloves and metal tongs and he kept talking about how dangerous this centipede was. The more he talked about it, the more we thought, 'What the heck are we doing with this thing in our offices?' It's scary, because it's voracious. He said, 'If it bites you, you won't die, but you'll wish you would.'"

"But it had such beautiful, inspiring motion," Nierva concedes. "The animators got really excited and inspired. We have a lot of footage from that day—taken from a safe distance."

## WIGGING OUT

Research for "Monsters University"—like with all Pixar films—often involves unusual experiments conducted on the Emeryville campus. For filmmakers to execute certain actions or effects in CG animation, they first employ real-life examples in order to inform and trigger their imaginations.

For example, the production team wanted to introduce some fun visual elements to the scene in which the MU clubs are pitching their benefits to Mike as he walks across campus. "For the art club," says Nierva, "there's a fuzzball character who pours paint on



his head and then slams his head against a canvas. The effects crew had a great time filming reference for the scene. They actually poured paint on a wig and slammed it against a white canvas—over and over again. The video is hilarious.”

And the resulting shot—which takes about three seconds—reflects the attention to detail that went into creating it.

### **BUILDING A 700-YEAR-OLD SCHOOL** **The Production Team Blends Research and Imagination to Construct an All-New Monster World**

The world of “Monsters University” required artists to explore multiple eras in order to design the campus exteriors and interiors. And their to-do list was long—from grand lecture halls—inside and out—to dormitories and fraternity row. Add to that the recreation of Monsters, Inc. itself—in two different time periods.

The first film gave filmmakers a place to start, says “Monsters, Inc.” director Pete Docter. “The guys did a lot of research for the first film. We realized that architectural details like flowers or leaves wouldn’t mean anything to monsters, who would prefer ornaments like fangs, claws and teeth. The ‘Monsters University’ team really picked up on that and pushed it even further.”

Building the university setting was a monumental task. “I think when we first got started, I didn’t have a specific look in mind for the school,” says director Dan Scanlon. “But as we did research, as we looked at a lot of different schools, we found that the ones that interested us the most were a little more sprawling. We wanted the school to feel like it had history—without being too stuffy. We wanted a really high-end institution, but we also wanted it to feel fun. We talked a lot about the idea of having rolling hills on campus and curving paths and buildings behind buildings, so that it felt like there’s always something around the corner. That’s what college life is like, after all. That became one of the cornerstones of the school.”

### **CENTERPIECE**

Robert Kondo, who served as sets art director for the film, says the team started where Monsters University started some 700 years ago: the School of Scaring. “It was one of the earliest things we designed, because it is the central point of the college.”

Artists pulled reference from a host of Ivy League schools—capturing the European flavor they found there, as well as the sculptured stonework—which, says Kondo, lent itself to the monster world quite well. “It was really beautiful. The sculptural aspects were perfect for monsterizing—we could get faces in there.”

Kondo was particularly impressed with a building at Harvard that featured massive bricks with lots of texture. “The overall scale of the building felt so massive. It felt like a great touchstone for us, along with a lot of Russian architecture, because of the attention to the mass of things. It’s that heft that really gave us the feeling of the monster world.”

As the focal point of the whole university—and theoretically the oldest building on campus, the School of Scaring needed to stand out. “We really wanted some iconic feature to stress the visual importance of the building,” says Kondo. “So we introduced a dome and arch. And one of the great things about the school are the front doors, which are big, dark, heavy metal doors—but there are small doors within the bigger doors, alluding to the fact that there are big monsters and small monsters—and maybe long ago when the building was built, there were enormous monsters—suddenly our world got bigger.”

Artists were able to subtly incorporate monster faces into many of the buildings, including the School of Scaring, creating eyes out of two big windows and a mouth from the front doors.

## **STEP INSIDE**

When it came time to design the interior of the School of Scaring, artists knew they had to match the wow factor of the outside. The team referenced a variety of sources, but one in particular became the key inspiration for the interior design: Dean Hardscrabble.

“I think it’s an extension of Hardscrabble,” says Kondo. “More than anything, it represents what she’s worked for. It’s the tradition and history of Scaring manifested. It’s what Mike loves, it’s what Sulley loves. It’s the center of the school, where so many ideas meet and we wanted that level of importance to come across.”

According to Kondo, early concept art featured very dark tones and the team leaned toward a more theatrical design that would suit the Dean during her dramatic backlit scenes. The team utilized hardwood and stoic pillars that were intended to showcase the theatrical look, but garner the respect a grand cathedral might command. They had countless Ivy League references on hand as well that ensured an academic feel to the overall design.

Production designer Ricky Nierva says that the academic feel was essential in the design of all of the buildings on campus, but the team was encouraged to have fun. “We monsterized our buildings with claw motifs, horns, teeth, spikes, tentacles and faces. We even have conduit running through the interior sets since everything would run on scream power.

“It’s been really fun,” continues Nierva. “The whole idea was to make it as fun as possible, because college can be fun. The monster world offers really unique opportunities to play with the design.”

## **HITTIN’ THE DORMS**

The idea of dorm life conjures an image for almost everyone and that’s exactly what filmmakers wanted to capture. Says Kondo, “For people who had gone to college, we wanted it to ring true: ‘Oh my gosh, that’s totally like the dorm that I lived in.’ You have that standard bed, desk, bookcase and closet. The fun is what the student brings into that space.”

Moviegoers will see Mike's dorm room early in the film, so the team had to zero in on his 18-year-old tastes. "Mike's all about Scaring," says Kondo. "He's there to be the best student he can be, to study, to really work hard towards it. But we had to have Little Mikey, his stuffed animal that he has in 'Monsters, Inc.' He also has this 'Full Scream Ahead' Scarer's bedcover that he's likely had forever. It's all about adding a layer of depth to Mike. We show where's he's been—with all of his items from home—and where's he's going—with a calendar outlining his semester. And of course he's got a great view of the School of Scaring: his goal is right there in sight."

## FRATERNITY ROW

One of the critical areas in the "Monsters University" campus layout is fraternity row, where Mike—and eventually Sulley, too, hear voices of doubt—literally. When their rivalry gets them kicked out of the School of Scaring, they turn to the Greek system and the annual Scare Games to earn their way back into Dean Hardscrabble's program. But their journey isn't easy. And designing the sets that played host to this part of the "Monsters University" story wasn't easy either.

The production team took several trips to different schools to reference a variety of fraternity and sorority houses and the way they were assembled at each school. "We tried to cast buildings that reflected the types of people that lived in them," says Nierva. "For example, the ROR house, which is elite—pledged by the wealthier, more advantaged and entitled monsters, is one of the bigger houses on the cul-de-sac on frat row. It's a majestic-looking house and we monsterized it with tentacle motifs and spikes."

The JOX house, in contrast, isn't as sophisticated in appearance. Years of parties have taken a toll on the house—though the JOX members could care less. "That house is the scene of the party," says Kondo. "It had to be full tilt with a couch out front, stolen street signs and Christmas lights."

Hitting the other extreme is the HSS house, a castle-like sorority that's home to the pale pack of Goth girls. It's also a far cry from the house that brand-new Oozma Kappa pledges Mike and Sulley ultimately call home.

## IT'S OK

The Oozma Kappa fraternity was founded to offer brotherhood to monsters who didn't fit in elsewhere. So when filmmakers decided to house these misfits not in a typical fraternity house setting, but in doting mother Ms. Squibbles' home—artists had fun with the design, filling the house with traditional furniture and family portraits on the walls.

"We imagined Grandma's house," says Kondo. "We included a lot of dainty grandmotherly patterns all around the house, but if you look closely, there are monster motifs in all of them—the delicate roses have thorns and eyeballs in them."

## MONSTERS INC. REDO

Production designer Ricky Nierva says the team was happy to have a blueprint of the scream factory from “Monsters, Inc.” “We thought it was great that we had the advantage of the beautiful original production design from Harley Jessup and Bob Pauley.”

But to create the scream floor for the opening scene with young Mike, which takes place some 20 years before the first movie, and the scene 10 years later when the Oozma Kappas pay an impromptu visit to MI—filmmakers had to rethink the factory setting. “We couldn’t just resurrect the original set,” says Nierva. “Technology had come too far. We had to rebuild it from scratch—and figure in things that would be different considering the difference in time.”

For example, Nierva and the production team had to rethink the leaderboard at Monsters, Inc. “In the original film, the scream totals are displayed on a bank of televisions,” says Nierva. “So we thought it might have started out like an old train station with the flip numbers. I think that’s so cool—it’s different enough, but still attached to the original movie.

“We considered the evolution of cell phones,” continues Nierva, “from big bricks to tiny phones. So we made sure that the door stations were chunkier and fatter to reflect the earlier time.”

Filmmakers tackled a number of other sets, from campus exteriors—one shot shows underwater monsters swimming to class—to the scream can and door laboratories and the MU football field. The common thread, of course, was in tying each set to the characters who inhabit the world. Says executive producer John Lasseter, “It’s a really beautiful film. It really captures the essence of a university setting, and the details are so fun, because if you look closely, everything is monsterized. And even better, it supports the optimism of Mike arriving at this university in search of his dreams.”

### **ILLUMINATED** **“Monsters University” Recruits New Technology**

Way back in 2001 when Mike, Sulley and a colorful cast of characters made their big-screen debut in “Monsters, Inc.,” Pixar had some major challenges and technical breakthroughs in the area of fur—the complexity of the way it moved, was lit and groomed—and clothing simulation, most notably Boo’s t-shirt. At the time, the ultra-hairy Sulley was so complicated and required so much rendering that the filmmakers were restricted in their desire to add other furry creatures. Now, with “Monsters University,” Pixar’s technical wizards have raised the bar again, taking on several new challenges to make it their most ambitious film yet in terms of lighting, simulation and rendering. Furry monsters abound, the new approach to lighting gives the film an art-directed sense of realism that adds to the experience.

To give a sense of the enormous scope of the project, “Monsters University” took 100 million CPU hours to render, which is equivalent to 10,000 years for a single

computer—the most in Pixar history. On average, each frame (if rendered on a single computer) would take about 29 hours. Pixar's render farm (the network of computers and processing units) roughly doubled in size from what it was on "Brave" to accommodate the needs of the production. Additionally, each computer was turned into a multiprocessor (with 12 processors in each) to allow shots to be broken up and rendered simultaneously on different machines using multithreading.

One of the biggest innovations in the creation of "Monsters University" was Pixar's adoption of a new lighting process called global illumination (GI), a revolutionary approach to lighting that Pixar's technology team elaborately evolved to give the film a striking visual palette. Global illumination allows the filmmakers to use area light sources—instead of potentially hundreds of individual lights—to give a more accurate physically based and realistic effect. One of the major benefits of this approach is that the filmmakers are able to get a very quick and early sense of what the final lighting will look like, instead of waiting until the end of the production process as was traditionally the case.

Chris King, global illumination lead for the film, says, "To light a computer animated film, we simulate the physics of light in the scene. In reality, light enters then bounces around infinitely off all the surfaces in the scene. That is impossible to compute so we have simplify the problem somehow. On this film we removed simplifications we used in the past and simulated lights and surfaces much more accurately."

Producer Kori Rae adds, "The global illumination initiative at Pixar was started by three very talented guys at the very beginning of the film who came to me and asked if they could give it a try. They had just six months to come up with something that they could formally present, and they did it. It was amazing. The end result is more beautiful and realistic lighting that perfectly suits the college setting. Plus, we found a more satisfying experience for the production team because they had a sense of lighting earlier in the production pipeline that allowed them to do great work under strict timelines." Veteran Pixar technical genius Bill Reeves (the second employee ever hired at Pixar and an Oscar®-winning pioneer in the world of computer graphics), Jean-Claude Kalache (DP, lighting) and Christophe Hery spearheaded the GI effort on "Monsters University" with help from Chris King, software VP Guido Quaroni and a team of experts.

Kalache recalls, "At the end of 'Up,' I had a 16-page document of notes about things that I wanted to improve, things that I wanted to research and things that I wanted to learn about. One thing that struck me was how complex our lighting setups had become even when we were trying to produce very simple imagery. One of the main projects that I identified was global illumination. When I found out I was going to be on 'Monsters University,' I went to Guido and Kori and proposed taking some time to figure out how to make our lighting setups simpler. Bill Reeves was also pursuing an interest in this area and when he joined the production, we proposed researching GI together. Christophe Hery, who was an expert in lighting at ILM, Jacob Kuenzel, a Pixar technical director, and Chris also joined the team. We knew that the long-term benefits of GI would be tremendous. At the end of the day, it makes a lot more room for the lighter to be

creative and artistic, while taking away many of the redundant technical steps they were doing.”

“We wanted to try a new approach to lighting for many years,” adds Reeves. “What’s changed is that computers are now faster and we’re smarter. GI is a major re-think of how things work. It’s more intuitive and natural, and it allows us to use just a few lights to get a really rich environment. GI lets you light a scene in a day or two, instead of two or three months. For Pixar, GI is definitely a revolutionary step. We had to learn to work differently, but the rich results are spectacular.”

Alex Kolliopoulos, rendering supervisor, explains that in order to solve the challenges of GI, Pixar had to first come up with a new way to allocate computer resources. “Global illumination has basically doubled the time and quadrupled the memory requirements for rendering,” he says. “We had to come up with a way to multithread the work, which meant turning our computers into multiprocessors. Rather than having one render per core, we’ll spread one render across multiple cores. In general, we are using four threads for our heavier renders, which means you have four cores dedicated to one render of a frame. It comes back roughly four times quicker, because it has four times the amount of memory available to it.”

## **CHARACTERS AND CROWDS: MORE MONSTERS THAN EVER BEFORE**

With its college campus setting, “Monsters University” required a large population of students, teachers and miscellaneous monsters. Characters supervisor Christian Hoffman led the technical side of creating nearly 500 different characters, built from six basic archetype models. Supervising technical director Sanjay Bakshi was responsible for overseeing the rigging, shading and modeling teams for the characters, in addition to other duties related to sets, layout, effects and global technology. JD Northrup was in charge of the crowds tech team and their task of populating stadiums, classrooms and campus activities. Adam Burke supervised the crowds animation team.

“The sheer number and variety of characters has been a big challenge on this film,” says Bakshi. “It’s a college movie that takes place on a big exciting campus, so we had to create a ton of students to make it feel like a real campus—only monster-y. Our rigging and modeling teams had to deal with a real diversity for the population, which wasn’t the case in the original ‘Monsters,’ in which arms and tentacles were rigged independent of the bodies. For this film, we wanted to make our characters really fleshy and organic. We knew we needed hundreds of characters, so we created different species with archetypical characteristics. From there, we were able to build sophisticated controls and change the properties to fit the variety.”

Hoffman adds, “We came up with six different monster types for background characters that we ended up pulling and pushing around, and adding horns, spikes, hair and other things to add variation. Charlies (named after a similar looking character from “Monsters, Inc.”) are characters with eyeballs on eye stalks and tentacles for arms and legs. Spiffs are more human looking, but with a horn for a nose. Pills are castle-shaped with three eyes and skinny limbs. Blocks are a big bruisers with square-shaped bodies.



Fungus monsters are slug-shaped and slide on the ground. They have two big bug eyes, a small round body and skinny limbs.

“One of the big advances on this film is with the animation controls or AVARs,” continues Hoffman. “The sophistication level has really improved. We’re able to get much bigger expressions than ever before. For example, we can move the corner of the mouth around and get a very sophisticated response in the cheek that wasn’t possible before. The animators can really push the characters so they look and feel more fleshy and natural. There’s much more movement in the faces.”

Creating crowds of monsters for scenes on the campus, in the classroom, and at the Scare Game competition was another important part in telling the story and making it seem believable. “This was quite a big film from a crowd perspective,” says Northrup, who headed up the crowds tech team. “In one scene at the football stadium, we have about 5,000 monster characters. Lots of other scenes have medium sized crowds of 200-400. What’s tricky about this film is the density of characters. We probably have more characters in more shots than any Pixar film to date.

“One of the things that sets this film apart from the others is the variety of character types we had to choose from,” adds Northrup. “We also focused on getting the walk cycles to look good, because it was a university campus and we knew we’d have lots of pedestrian shots. The early litmus test for us was in the opening sequence where we see Mike walking on the campus for the first time. The camera comes across very different locations on the campus, ending with him getting to his dorm. It’s a big sweeping establishing shot, and the campus is bustling with activity. There are about 500 characters in the mini-quad area, and then he moves onto the main quad with about 800 more.”

Northrup says the team is particularly proud of the final competition sequence that takes place in a big amphitheater. It was no easy task, he says, populating the arena with about 1,600 monsters who were all coming and going, cheering and storming the field.

## **SIMULATION: MOVING FUR, VEGETATION, PILLOWS & BOOKS**

Christine Waggoner, simulation supervisor, was part of the team that helped create realistic movements for Sulley’s fur and Boo’s t-shirt in “Monster’s Inc.” This time around, advancements have made her job easier in many ways, but also presented new challenges.

“There are actually a lot more furry characters in this film than ever before,” says Waggoner. “Basically, we could only have one main furry character in ‘Monsters, Inc.’ because it was such a big deal at the time and affected our render time. With ‘Monsters University,’ 15-20 percent of the monster population have hair. It’s gotten a lot easier to do hair and fur. The technology has really matured and so has our simulation pipeline. Our graphics hardware allows the animators to see the hair while they’re animating. They don’t see simulated hair, but they are able to visualize the actual groom at a speed that can work interactively. Artistically, it lets the animators and layout artists better gauge the composition of a shot and account for the volume of fur.”

Waggoner says the film called for another breakthrough for the simulation group: good grass. “It turns out that there are a lot of grassy surfaces with our lush campus and outdoor competitions. We put together a pipeline that lets the characters almost automatically interact with the grass—even leave footprints. We built technology that made it possible to deal with the complicated problem of how different body types—multiple legs, arms, tentacles, tails and slugs—interact with the vegetation.”

Chris King, global illumination lead for the film, says, “To light a computer animated film, we simulate the physics of light in the scene. In reality, light enters then bounces around infinitely off all the surfaces in the scene. That is impossible to compute so we have simplify the problem somehow. On this film we removed simplifications we used in the past and simulated lights and surfaces much more accurately.” Another one was simulating turning the pages of books—a key detail in the film’s academic setting. So, a special rig was created so that the pages would appear to flip naturally.

When it came to technology, director Dan Scanlon was pleased with the end results. “I’m always amazed by what the technical minds at Pixar are capable of accomplishing. Technology is really the backbone of our storytelling process—one of the cornerstones of the studio—making it possible for the smallest of details to come to life in a way that connects with people in incredible ways.”

### **MAKING MONSTER MUSIC**

**Filmmakers Tap Randy Newman, Axwell & Sebastian Ingrosso  
of Swedish House Mafia and Mastodon**

“Monsters University” rocks campus this summer featuring music from award-winning composer Randy Newman and Axwell & Sebastian Ingrosso of Swedish House Mafia. Filmmakers also tapped the Atlanta-based hard rock band Mastodon to serenade one of the film’s new monsters.

“We wanted to capture the college feel in ‘Monsters University,’” says Scanlon, “and music is a big part of that. The score and the inclusion of other great musicians like Axwell & Sebastian Ingrosso [of Swedish House Mafia] and Mastodon help us convey a fun, freewheeling college atmosphere.”

### **NEWMAN SCORES!**

Oscar®, Grammy®- and Emmy®-winning composer/songwriter Newman is back, marking his seventh Disney•Pixar film. The 20-time Oscar nominee’s wins include “If I Didn’t Have You” for “Monsters, Inc.” and “We Belong Together” for “Toy Story 3.” The recently inducted Rock and Roll Hall of Fame member created a full Alma Mater titled “Monsters University,” establishing a recurring collegiate theme. “We recruited the team at Pixar Canada to record the Alma Mater,” says Scanlon. “We needed a giant crowd of crazy monster students to be singing it and the Canada team was great for this—the end result is sort of perfectly ‘off.’ Actually, the first time we recorded it, it was really

good. I had to say, ‘Guys, these are college students at a sporting event, let’s mess it up a little bit.’”

Newman added a unique flair to his score, calling on renowned international drum corps The Blue Devils to contribute a definitively collegiate sound. The composer also incorporated concert band music to exemplify the feeling of being in school. In fact, says Newman, “There’s a little bit of Brahms’ ‘Academic Festival Overture’ when Mike is riding the pig. I like to think Brahms would be extremely flattered by his inclusion in the score.”

The score—recorded with a 112-piece orchestra—features a few character themes, including an accordion tune to help illustrate the less-than-cool status of the Oozma Kappa fraternity; a laidback shuffle to introduce Sulley; and the aspiring Scare student Mike Wazowski is often accompanied by a clarinet that, Newman notes, changes as Mike’s character arc evolves.

Producer Kori Rae says the score triggered emotions when she least expected it. “There’s a scene in the movie in which Mike takes Sulley and the Oozma Kappa brothers to see a scare floor at Monsters, Inc. When Randy played the cue for that scene at our first recording session, it made me cry because it was so powerful and emotional. His music is just transcendent. It’s amazing.”

## MONSTER MOVES

When Mike and Sulley find themselves in the midst of a fraternity party, filmmakers wanted to showcase their monster moves—but first they needed the music. Enter Axwell & Sebastian Ingrosso of Swedish House Mafia with a party song called “Roar”—of course—featuring an upbeat electronic dance sound that even monsters could appreciate. “We wanted to keep it funny, funky and at the same time a bit cool with a hint of monsters in it,” says Axwell.

Scanlon approves. “It’s really a fun song. I remember watching the animator work on this scene. As he played back the song, the artist at the next desk—who wasn’t even working on the movie—couldn’t help moving his feet. Obviously, that guy had been hearing that song for days, but yet the second he heard it, he just had to move his feet.”

## ROCK ON!

Faced with the question of what a sweet monster might listen to during a free moment, filmmakers decided to push the envelope. “There is a great moment in ‘Monsters University’ when we thought it would be funny if the tunes were some of the most intense heavy metal imaginable. Mastodon was the obvious choice. They show off an unexpected monstrous side for one of our great new characters.”

They chose an existing song from the group called “Island.”

The “Monsters University” soundtrack, set for release from Walt Disney Records on June 18, 2013, is available for pre-order at <http://smarturl.it/musAmazona1>. On June 4, the label

will release the “Roar” digital single, plus remixes by Style of Eye and Yogi. The album’s track listing follows.

1. Main Title – Score
2. Young Michael – Score
3. First Day at MU – Score
4. Dean Hardscrabble – Score
5. Sulley – Score
6. Scare Pig – Score
7. Wasted Potential – Score
8. Oozma Kappa – Score
9. Stinging Glow Urchin – Score
10. Field Trip – Score
11. Rise and Shine – Score
12. The Library – Score
13. Roar – Performed by Axwell & Sebastian Ingrosso of Swedish House Mafia
14. The Scare Games – Score
15. Did You Do This? – Score
16. Human World – Score
17. The Big Scare – Score
18. Goodbyes – Score
19. Mike and Sulley – Score
20. Monsters University

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