

2021 THE YEAR AHEAD

SEEDING A REVOLUTION

A SPANISH CHEF'S QUEST TO HARVEST RICE FROM THE OCEAN
By Matt Goulding

Chef Ángel León holding seagrass at his Michelin three-star seafood restaurant, Aponiente, in El Puerto de Santa María, Spain

PHOTOGRAPHS BY PAOLO VERZONE FOR TIME



THERE ARE VERY FEW THINGS ÁNGEL LEÓN HASN'T DONE WITH THE FRUITS OF THE SEA.

In 2008, as a young, unknown chef, he took a loin from one fish and attached it to the loin of another, using collagen to bind the two proteins together. He called them hybrids and served them to unsuspecting diners at Aponiente, his restaurant in the southern Spanish port town of El Puerto de Santa María, just across the bay from Cádiz. He discovered that fish eyes, cooked at 55°C in a thermal circulator until the gelatin collapsed, made excellent thickening agents for umami-rich sauces. Next he found that microalgae could sequester the impurities of cloudy kitchen stocks the same way an egg white does in classical French cooking. In the years since, León has used sea bass to make mortadella; mussels to make blood sausage; moray eel skin to mimic crispy pigskins; boiled hake to fashion fettuccine noodles; and various parts of a tuna's head to create a towering, gelatinous, fall-apart osso buco.

It is these creations, and the relentless curiosity behind them, that have helped turn León into one of most influential chefs in the world. The Spaniards call him the Chef del Mar, a man singularly dedicated to the sea and its bounty. But Aponiente isn't anything like other gilded seafood temples around the world. You won't find Norwegian lobster there. Or Scottish langoustines. Or Hokkaido uni. In fact, unless you're an Andalusian fisherman it's unlikely you'll know most of the species León serves to his guests.

That's because León isn't interested in plucking from the sea its most celebrated creatures. He wants to go deeper to find something you didn't know existed: "What's more hedonistic, eating something no one on the face of the earth has ever tried, or eating another f-cking spoon of caviar?" Jellyfish, sea worms, a bounty of sea "vegetables" foraged from the ocean floor: all have found their way onto his menu.

But for León, hedonism is beside the point. Everything that he does communicates an unshakable



Juan Martín, center, of Aponiente works on the seagrass fields planted around León's restaurant

commitment to honoring the ocean. He thinks about the sea the way a physicist or an astronomer thinks about the sky: as an infinitely discoverable space, where the right mix of curiosity and discipline can yield solutions to some of the most pressing problems of the 21st century. In his wide-eyed enthusiasm and boyish curiosity and fierce marine mania, he comes across as a mixture of Captain Nemo and Willy Wonka.

Follow León long enough, and you'll learn that his venture ever deeper into the abyss isn't a gastro free-for-all but part of a very specific dream that's been taking shape in his head for years. A dream that extends well beyond the walls of his restaurant and into the coastal plains of Cádiz. In this dream, he sees men with long wooden brooms scraping the surface of the marshes, piling up coarse salt crystals in little white hills that shimmer in the Andalusian sun. He sees the region's vast network of estuaries overflowing with flora and fauna—tiny, candy-sweet white shrimp, edible seaweeds like marine mesclun mix, sea bream and mackerel in dense silver schools. He sees a series of mills, stone-built and sea-powered, grinding through grains for the region's daily bread. A wind-swept, sun-kissed saltwater economy, like

the one that once made Cádiz a center of the world.

Founded by the Phoenicians in 1100 B.C., Cádiz is one of the oldest continuously inhabited cities in Europe. Over the course of three millennia, many of the world's greatest empires have settled here, attracted by the strategic location: a narrow appendage of land at the edge of the Iberian Peninsula, just beyond the mouth of the Mediterranean. The Romans, Visigoths and Muslims all had their Cádiz years, fueling their empires with the wealth of this teeming water world. But it wasn't until the Age of Exploration, when the city served as the launchpad for Spain's greatest ambitions, including the second and fourth voyages of Columbus to the Americas, that Cádiz became one of Spain's wealthiest cities.

Those days have long passed. After Spain lost its American colonies in the 19th century, Cádiz never recovered. Today, it has the highest rate of unemployment of any region in Western Europe. León wants to fix that, to help rebuild the robust sea economy that defined Cádiz's most storied years. His career has been a slow, steady fight to do just that.

But now, he believes he's discovered the centerpiece of his ambitious dream: fields of rice stretched out for miles of paddies, the feathery stalks

protruding from the sea itself. Scientists have long identified seagrasses as one of the most vital ecosystems in the fight against climate change, but what few knew is that those blades of grass also contain clusters of small, edible grains with massive potential. Of all the dreams León has chased in this quiet corner of southern Spain, this is the one he plans to build his future around. This, more than the Frankenshrimp or mussel sausage, is the one that could help rebuild his beloved region and, with any luck, even change the way we feed the world.

"THE SEA SAVED ME," León told me one morning in 2019 aboard his 26-ft. fishing boat, Yodo. The sun had just peeked above the horizon as we made our way past the tip of Cádiz, its church spires and mosque domes casting a silhouette of the city's multilayered history.

"I was a terrible student. Couldn't sit still, always in trouble," he said. "But when my dad took me out here on his boat, everything changed."

León was born and raised in Cádiz, along with two older sisters and his younger brother Carlos, who helps manage Aponiente. Their dad kept a small fishing boat, and after school and on weekends, he would take his two sons out fishing in the Bay of Cádiz. Ángel León Lara, a hematologist, had high expectations, and often clashed with his son over his terrestrial troubles. "But once we were out on the water, we weren't father and son," says León. "We were friends."

His brother Carlos saw a different sibling out on the water: "The boat is where the barrier between father and son broke down. We'd smoke a joint, tell stories, things that friends did." Ángel couldn't sit still long enough to be in a classroom, Carlos told me, but he was captive to the sea. "Most kids are scared to touch creatures from the sea. But Ángel would smell them, touch them, rub their scales, poke their eyes."

León's success at sea only served to underscore his struggles on land. His hyperactivity made him

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a menace in the classroom; he went to five high schools and barely graduated. He enrolled in a hotel school in Seville, where he studied cooking for three years and began to find his footing on terra firma. In 1996, he moved to France to cook at Le Chapon Fin, a Bordeaux institution that opened in 1825.

León remained quiet as we passed fishing boats and jetties on the outskirts of Cádiz, an espresso pinched between his fingertips. Since those early days with his dad, he's rarely missed a sunrise on the water. His first goal when he fires up Yodo is to get out—out of

cell-phone range, out of reach of his restaurant team and his family. "The truth is," he said, staring at my notebook, "I like to come out here alone."

When we hit the open seas, the spell of silence was broken. "Turn left and you hit the Mediterranean, turn right and you're in the Atlantic," said León. "Two totally different worlds." This nexus of two great bodies of water, where two vastly different ecosystems mix into a special cocktail of ocean life, continues to be a chief source of inspiration for León.

León turned on the fish tracker and showed me the schools of fish swimming some 20 m below us. He opened up the bait storage in the rear of the boat, grabbed a squid the size of his hand and worked it onto a giant hook. He rolled another cigarette, put it to his lips and sank into his chair.

"Some days I don't even fish. I come out here to clear my head. I used to be a psychopath—I'd go way out into the ocean on my own. But now I have a family to think about." León and his wife Marta, who runs the more casual Taberna del Chef del Mar down the road from Aponiente, have a 5-year-old boy, Angel. "Easily the best dish I've ever helped create."

France taught León discipline—how to clarify a stock, how to debone a quail, how to cook 14 hours a day without complaining. Afterward, he bounced around, cooking in Seville, Toledo, Buenos Aires, preparing to start his own venture.

Back then, El Bulli, on the coast of Catalonia, was known as the best restaurant in the world, and its virtuoso leader, Ferran Adrià, was busy rewriting the rules for fine dining. By the time El Bulli closed in 2011, a generation of disciples had dispersed across the country, spreading the gospel of technical, modernist cuisine that shaped Spain into the gastronomic center of the world for the first decade of the 21st century.

While León is one of the few prominent chefs in the country who did not emerge from the El Bulli system, he carries within him the restaurant's most enduring legacy: the need to question all conventions. When he opened Aponiente in 2007, León set out to change the way people thought about the ocean. Not just through a radical reimagining of what to do with familiar fish, but by looking for ingredients nobody had ever tasted. He built his menu around *pesco de descartar*, trash fish: pandora, krill, sea bream, mackerel, moray eel. But in León's mind, these are some of the most noble and delicious creatures in the sea. He did this as much for the culinary challenge as for a growing streak of environmentalism.

For the first three years, people stopped by,

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León in the marine plankton lab with his director Carlos Unamunzaga, left

read the menus and turned around. They didn't understand what this strange restaurant was trying to do. León found himself teetering on the edge of ruin.

He remembers a talk with Adrià in those early years that helped him trudge on. "Nobody understands me," he said to the famous chef. "Perfect," said Adrià. "That's because you're pushing the vanguard."

Nothing was hitting aboard Yodo. We were waiting for the tidal bulge, that moment before the tide turns when gravity and inertia cancel each other out—eight minutes of equilibrium that, according to León, is when fish are most active: "If we're going to catch anything today, it will be then."

When it hit, León cast his rod off the back edge of the boat and set the line, then ran inside and used

the radar to try to position the boat directly in the middle of what looked like a smudge on the screen. "This is where the action is."

We sat in silence, waiting for the action, but the action never came and slowly the boat began to be sucked back toward the coastline. The tide had turned.

IN 2010, AFTER YEARS of serving just a handful of guests a day, Aponiente won its first Michelin star, a recognition that León says "helped change everything." In 2014, it won a second star, and suddenly people began to travel to Cádiz specifically to eat at the restaurant. By the time it received its third Michelin star in 2017, Aponiente had gained a strong international presence. León used the growing

platform to sharpen his message, working with universities on sustainability projects, organizing events with chefs and academics to discuss the fragility of our ocean ecosystems, developing commercial products like sea bacon, made from the discarded bellies of sea bream and smoked over pineapple.

For all his success, León is not your typical celebrity chef. He rarely leaves his hometown, eschewing the international circuit in favor of long mornings on the water and long evenings in the lab. His clipped-consonant Spanish and small-town humility are more befitting of a fisherman.

"He's carving out his own path in the food world," said Cristina Jolonch, one of Spain's most respected food critics, but "it's his defense of the sea that



matters most." León is aware of that. "The day that I have nothing more to offer beyond being a good cook, Aponiente will no longer make sense."

EVERY YEAR IN JANUARY, León and his R&D team travel by train to Madrid Fusion, the food world's preeminent culinary conference, to dazzle auditoriums of journalists and chefs with their latest discoveries. In 2009, he unveiled an edible form of phytoplankton, now used in kitchens across the world. In 2011, León announced the first line of seafood-based charcuterie, using discarded fish parts to make mortadella and blood sausage and chorizo, all dead ringers for the real thing. In 2016, the auditorium went dark as León emerged on the stage with a special cocktail filled with *luz de mar*, bioluminescent bits found in the bellies of tiny crabs that glowed like a galaxy of stars as he swirled his gin and tonic.

“WE TURNED THE SEA UPSIDE DOWN. WE WANTED TO REALLY LOOK AT THE OCEAN FLOOR TO SEE WHAT SECRETS IT HELD.”

In 2018, León and his team decided to take a different approach. He explained: "We turned the sea upside down. We wanted to really look at the ocean floor to see what secrets it held." What they found in the murky depths was a vast and varied garden of ocean flora: roots, fruits, leaves.

León has a tendency to liken everything he finds underwater to a terrestrial analog, and soon his menus were brimming with sea pears, sea tomatoes, sea artichokes. The so-called vegetables didn't have the same impact as sparkling crab guts or fish-belly bacon, but León knew he needed to keep his focus on the ocean floor.

That's how he found something he had been staring at all along. León remembered as a kid in Cádiz seeing vast fields of rice along the fringes of the bay. As he talked to his team, he realized that what he recalled as rice was actually *Zostera marina*, eelgrass

that grows in coastline meadows around the world.

Juan Martín, Aponiente's resident biologist who has worked with León for years, knew the plant well. "I had been studying seagrasses for 15 years—but always from the standpoint of the ecosystem. It never occurred to me or anyone else studying it that it was edible." That is, until León showed up one day at Aponiente with a printout of a 1973 article in *Science* documenting the diet of the Seri, hunters and gatherers of Sonora, Mexico, who have eaten eelgrass for generations. Like many grains, it required an elaborate process of threshing, winnowing, toasting and pulverizing before being cooked into a slurry with water. The Seri ate the bland paste with condiments to punch up the flavor: honey or, preferably, sea-turtle oil.

León's R&D team set out to study the plant in detail, signing an agreement with the University of Cádiz to partner on the research. "*Zostera* had been gathered and consumed before, but it had never been cultivated," said Martín. "That's a whole different proposition." They worked with the university to define the ideal growing conditions: water current, temperature, salinity, depth, sunlight.

In the summer of 2019, León and a small crew of cooks and scientists waded out into an estuary a few miles east of the restaurant and pulled bushels of eelgrass from the ocean bed. In total, they collected 50 kg of grains, more than enough to run nutritional analysis and experiments in the kitchen.

"When we first started this process, so many things could have gone wrong," said David Chamorro, the head of R&D at Aponiente. But one by one, the variables fell in their favor: perennial plant with exponential growth and a stout nutritional profile, including a payload of fiber and omega-3 fats—and gluten-free.

As for the taste? "For a year, we were working on this grain and we had no clue how it tasted," said León. "I was nervous. What if it tastes like sh-t? The day I ate it, I was relieved."

I first tasted eelgrass on a rainy afternoon in late 2019 in the upstairs research laboratory of Aponiente. Downstairs, the staff cooked and served what would turn out to be the final meal before the COVID-19 pandemic kept the restaurant closed throughout the spring of 2020 until it reopened in July. *Zostera* grains look more like amaranth or a chia seed than rice—a short, pellet-like grain with a dark complexion. León boiled it like pasta, passed me a spoonful, then watched me closely as I processed. The first thing you notice is the texture: taut-skinned and compact, each grain pops on your tongue like an orb of caviar. It tasted like the love child of rice and quinoa with a gentle saline undertow.

I asked León about the ideas the grain inspired in the kitchen, but he didn't seem ready to talk. Chamorro, for his part, was positively giddy about the possibilities: pressing the grain to make oil, fermenting it into sake, grinding it into flour. "Imagine if we gave 10 kilos of flour to the 10 best bakers in Spain. The types of breads we'd see—and all of them gluten-free."

But before the world sees eelgrass baguettes and eelgrass wine, it will first need to see more eelgrass. Having partnered with Esteros Lubimar, a fisheries company based out of Cádiz, León and his team have drawn up an ambitious plan for domesticating eelgrass. Rather than starting from seed, a process that requires patience that León doesn't have, they are harvesting eelgrass from different coastal areas around Spain and transplanting it to the Bay of Cádiz.

If all goes according to plan, they will harvest 12 acres of eelgrass in the summer of 2021. León and team will use most of those seeds (about 22,000 kg) to expand the eelgrass significantly in 2022–2023, and he will keep about 3,000 kg to cook with at the restaurant and experiment with in the lab.

With more than 5,000 hectares of estuaries and

From left: the seagrass plant; a dish with plankton rice at Aponiente; and the grains of the sea rice

abandoned salt beds strewn across the region, if León and team have their way, Cádiz could soon be home to one of the largest eelgrass meadows on the planet.

THE ONLY THING less sexy than grass is grass that grows in water. When Robert Orth, professor of biological sciences at the Virginia Institute of Marine Science, started researching seagrasses in 1969, he found it a very lonely field: "You could literally count the number of papers published by scientists on one hand." According to Orth, people either think seagrass is gross, a nuisance—or that it doesn't exist at all. "Seagrasses are the ugly duckling of the environmental movement," he says. "They're not colorful like coral or beautiful like mangroves."

But there is something extraordinary about seagrasses: they are the only plants that flower fully submerged in salt water. They have all the equipment of a terrestrial plant—roots, stems, rhizomes, leaves, flowers, seeds—but they thrive in underwater environments. Seagrasses like *Zostera marina* are ecosystem engineers: the meadows they form along coastlines represent some of the most biodiverse areas in the ocean, playing host to fauna (like seahorses, bay scallops and sea turtles) that would struggle to survive without seagrass.

But anthropogenic forces—climate change, pollution, coastal development—have threatened eelgrass meadows across the world. As León and team refine the conditions for large-scale cultivation, they hope to facilitate its growth along coastlines around the world—Asia, North America and, above all, across the Straits of Gibraltar in Africa—turning millions of hectares into a source of food, protection against erosion and a weapon against climate change.

"In terms of the ecological importance of seagrasses, it's impossible to say too much about them," said Jeanine Olsen, professor emerita at the University of Groningen in the Netherlands. "They don't have the poster-child appeal of coral reefs, but

they are just as important in terms of productivity, biodiversity, carbon sequestration and habitat."

For all the talk about the Amazon being Mother Nature's lungs, rain forests are only the fifth most efficient carbon sink on the planet. Seagrass meadows are second only to tundra in their ability to sequester carbon, absorbing carbon up 35 times faster than the same area of tropical rain forest.

But, like many of our best tools for combatting rising temperatures, seagrass meadows have been dying off at an alarming rate over the past several decades, thanks to a combination of rising water temperatures and increased human activity along coastlines. The lack of awareness has only accelerated the decline.

In 2006, Orth and more than a dozen scientists published a paper in *BioScience* on the alarming decline in seagrasses around the world: "Salt marshes, mangroves and coral reefs receive threefold to 100-fold more media attention than seagrass ecosystems, although the services provided by seagrasses, together with algal beds, deliver a value at least twice as high as the next most valuable habitat."

It appears Orth and his colleagues' message got out. In the years since, the field has grown precipitously, with more money and more research. Restoration projects are under way all over the world, including one in the coastal lagoons along Virginia's eastern shore, overseen by Orth, that has regenerated more than 3,500 hectares of seagrass meadows.

Up until this article, León's project has been a closely guarded secret. Not even the local Spanish marine biologists know what's happening. I spoke and exchanged emails with half a dozen of the top seagrass experts around the world, and each responded with their own version of surprise. None more than Carlos Duarte, whose broad base of marine expertise has brought him from the tropics to the North Pole, from dense coastal ecosystems to the unknown depths of the "dark ocean."

What León is doing is unprecedented, Duarte told me on the phone from Mallorca. I had just shared the news with him. "This will be the first eelgrass that will be domesticated," he finally said, more to himself than to me. "They will be pioneers." Then, after another pause. "It's a big achievement."

Duarte knows the area and the conditions well, and though he stressed that the yield for eelgrass tends to be low, he said it—along with other factors like taste and nutrition—can be improved through genetic selection. "The things that have gone wrong with traditional agriculture won't be affected in the sea. No fertilizers, no pesticides, no insects," he says. "It will be by default a green sustainable crop. You're not taking an exotic species and bringing it here. You're taking one of the jewels of the Bay of Cádiz and just making more of it."

But there's another side to the equation that wasn't part of any seagrass scientist's environmental



calculations: the water itself. Nearly 97% of all water on earth is salt water. For all our brains and ambition, humans have never figured out much to do with salt water. We use it to cool thermoelectric power plants. We use it in some forms of mining. Most of our efforts and resources have been focused on turning salt water into fresh water, but desalination remains expensive.

Just 1% of all water on earth is readily available fresh water, and the planet is growing thirstier by the day. According to the U.N.'s Food and Agriculture Organization, humans will need to increase agricultural output by 60% to feed the nearly 10 billion people

expected to live on earth by 2050. But just as our demand for fresh water has never been greater, our supplies have never been in more doubt. Climate models predict that rest of the 21st century will be a roller coaster of historic droughts and historic floods, and resources have been focused on turning salt water into fresh water, but desalination remains expensive. Finding a way to use salt water in agriculture would dramatically alter the calculus for feeding the planet.

The Dutch have taken the lead in saltwater agriculture. Government-funded efforts to introduce salt-water-receptive genes to traditional vegetables like potatoes, tomatoes and carrots show promise.

León's Aponiente restaurant, in a centuries-old mill, surrounded by the estuary where he will cultivate his underwater garden

For the Chinese, the world's largest consumers and growers of rice, saltwater rice has been the holy grail for nearly four decades. Yuan Longping, the agronomist who first developed high-yield hybrid rice back in the 1970s, has been trying to crack the code since the early 1980s. In 2018, Yuan and his team successfully grew saltwater rice in the desert flats outside of Dubai, achieving more than double the average global rice yield.

But they did this through decades of crossbreeding, and by diluting salt water with fresh water. What León is after is something different altogether: a native

plant, capable of delivering immense nutritional and ecological benefits, grown directly in ocean beds.

Rice may be the world's top source of calories, but it also requires two increasingly scarce resources: land and fresh water. And the cocktail of gases—carbon dioxide, methane, nitrous oxide—created during rice cultivation has been found to contribute to climate change. León's sea rice, by contrast, has a similar yield as terrestrial rice but can grow in any temperate coastal area in the world, all the while sequestering excess carbon.

A few of the experts I spoke with expressed concerns about the logistical challenges of cultivating *Zostera marina*. "Eelgrass is a complex problem," Orth told me. "You have to have all the right conditions: light, temperature, current."

The challenges aren't lost on Juan Martín, but Martín points out that the estuaries where they'll be planting the eelgrass give the team full control of the elements. León and team have also been working with geneticists in the hopes of improving some of the core characteristics of *Zostera*.

"Rice has the advantage of 7,000 years of genetic modifications," said Martín. "In very little time, we could make huge improvements."

León is thinking ahead. Not just to a supercharged version of his saltwater rice, but he and his team have discussed the possibility of isolating the saline genes in *Zostera marina* to crossbreed with other staples: corn, lentils, lettuce.

"It's not just the rice," said León. "It's the dream of having an underwater garden for human beings."

"THIS IS WHERE we'll plant the rice, out there in the distance," said León, pointing from the second-floor terrace of the old mill that houses Aponiente to the sunbaked estuaries below. "The waters will be packed with life: shrimp, oysters, sea bream. Next year, the guests won't start their meals in the restaurant, but right on the water, catching the first bites of their meal!"

He gave me this tour over FaceTime in the early summer. It was supposed to be in person, the two of us taking in the young eelgrass meadows he hoped to plant in the late spring, but then COVID-19 crushed Spain and the country shut down until late June. León had his shirt off, a cigarette pinched by the boyish smile that had all but disappeared. The restaurant was slated to open the following day, and he had just done a final tasting for a menu nine months in the making. The unifying concept would be an edible interpretation of the tidal marshes. There would be emerald puddles of plankton butter and marine bone marrow and *burrata* forged from sea snails. For León, the star of the season was the *gusana del mar*, a species of sea worm.

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IT'S THE DREAM OF HAVING AN UNDERWATER GARDEN FOR HUMAN BEINGS!

Despite concerns from his staff and partners, León has insisted the worm be a central part of the menu. After a dozen different experiments, he settled on a grilled sea-bream cheek with a rich herby fish broth and a crunch sea-worm garnish.

But even as he talked me through the details of the final menu, I could tell his mind was elsewhere. He sounded relieved when I asked about the plants. "It's finally happening," he says. "On July 17, we have our crews going out to collect *Zostera* from Galicia and Cantabria. We should have it all planted by the early fall!"

With the meadow finally taking shape in his mind, he had a new problem to worry about: "What am I going to cook with 22,000 kg of sea rice?" he asked, his wide-eyed grin swaddled by a cloud of smoke. "This whole process has been like giving birth, and the cook in me died somewhere along the way. I had too much fear, too much respect for every f-cking grain."

He had come back inside now, taking a seat at a long table inside the office he had renovated during the lockdown. Behind him, on a long white wall, a local artist had mounted the heads of the major species of fish in the Bay of Cádiz, 35 in total. It had the effect of making León look like a cartoonish hero, with an army of sea creatures at his back.

"Imagine making a mochi made from ground *Zostera* flour and pulverized shrimp... Or playing with textures of al dente *Zostera* pasta... Serve it in two rounds: first the husk, then the grain itself... We can harvest it early, when the seeds are like baby favas, and use it like spring peas but with the flavor of the sea..." León kept going, ticking through half a dozen other ideas before taking a breath.

León likes to say that he's just a simple cook. It doesn't read as false modesty as much as an expression of his abiding disbelief that a pirate-mouthed kid from one of Spain's poorest regions who barely graduated high school could find himself in a position to do things no one else ever has. But there he was, on the brink of another breakthrough.

He explained: "How much do we miss from scientists who have spent their entire lives studying one thing? Sometimes you spend all day staring through a microscope and you don't look up long enough to remember that you're hungry."

As he was talking, he began to run his hand over the heads of the sea creatures hanging from his wall: mackerel, squid, dogfish. He settled on the spotted snout of the mounted moray eel—the same species fishermen since the dawn of time have given back to the sea but with which León had built a career fashioning crispy *chicharóns* and soufflé "potatoes" and suckling pig of the sea.

"You need the science, but you also need the hunger."

GoULDING is a New York Times best-selling author of over 20 books on food, including *Grape, Olive, Pig*



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