Axial debuts to link neuroscience and gut

Axial Biotherapeutics is the latest microbiome firm to emerge. Private and venture capital investors, including Longwood Fund and Domain Associates, have put an initial $19 million into the California start-up.

Axial is based on the work of California Institute of Technology professor Sarkis Mazmanian. In mouse models, his lab has shown a connection between neurological disorders and interventions in the gut microbiome. Axial intends to expand on these discoveries to find pathways and mechanisms amenable to biotherapeutic intervention. Initial disease targets include autism and Parkinson’s disease.

Technology that Axial has licensed from Caltech includes Mazmanian’s work involving Bacteroides fragilis. Raising the level of these gut bacteria can reduce autism-like behavior in engineered mice.

Mazmanian and collaborators also propose a link in Parkinson’s (Cell 2016, DOI: 10.1016/j.cell.2016.11.018). In mouse models again, they found that bacteria from Parkinson’s patients enhanced hallmark of the condition. They also identified microbial metabolites that induce symptoms.

Such microbes may be useful disease biomarkers, therapeutic targets, or treatments. “Product candidates could be quite diverse depending on the indication, what type of corrections to the microbiome are required, and the regulatory strategy that we choose,” CEO and cofounder David H. Donabedian says.

Axial is benefiting from surging interest in microbiome R&D. In 2016, investors and drug firms have funded start-ups including Enterome, Second Genome, and Seres Therapeutics. In May, the White House launched a $520 million National Microbiome Initiative, and The Kavli Foundation unveiled its $1 million Microbiome Ideas Challenge.—ANN THAYER

OUTSOURCING

Patheon acquires a Roche facility

A year ago, Roche announced it would sell three plants in Europe and one in the U.S. Last week, the drugmaker said it has a buyer for the one in the U.S. The pharmaceutical services company Patheon has agreed to acquire Roche’s active pharmaceutical ingredients (API) facility in Florence, S.C. Patheon will pay “an immaterial sum” and secure a multiyear agreement to supply Roche.

The deal follows the service firm’s 2015 acquisition of API manufacturer Irix Pharmaceuticals, which also has a site in Florence as well as one in Greenville, S.C. Irix was founded in 1996 by two former Roche executives. Originally focused on final dosage and finished drug services, Patheon has been building out the API part of its business since acquiring the drug chemicals division of DSM in 2014. The 28,000-m² facility in Florence brings capacity for highly potent APIs plus capabilities for solid-state chemistry and micronization. Reaction vessels range in size from 50 to 11,000 L. The company plans to add spray drying at the site.

“The company will benefit from the additional North American API capacity and adds a state-of-the-art facility with approximately 200 scientific and manufacturing professionals,” says Patheon CEO James Mullen.

Roche says the deal should be completed by February. The firm continues its effort to divest sites in Leganés, Spain, and Segrè, Italy, according to spokesperson Anja von Treskow. She says Roche is in the process of ramping down production at its site in Clarecastle, Ireland.

Meanwhile, the drug company is spending about $300 million on a new manufacturing site in Kaiseraugst, Switzerland, that will support the low-volume, high-complexity chemistry required for emerging therapies.—RICK MULLIN

CONSUMER PRODUCTS

Group grades retailers on safer chemicals in products

A new report gives 11 major U.S. retailers an average grade of D+ in meeting rising consumer demand for safer products, though it also found major progress at some firms.

The assessment is part of the three-year-old Mind the Store campaign by the advocacy group Safer Chemicals, Healthy Families. It scored the companies on policies and actions that remove hazardous chemicals from products they carry, disclose product ingredients, and promote third-party product safety standards.

The Mind the Store campaign found that three companies—Walmart, Target, and CVS Health—have made big strides in reducing or eliminating chemicals such as phthalates, triclosan, bisphenol A, formaldehyde, and polyvinyl chloride.

But the report called out Amazon, Costco, Albertsons, and Kroger for lacking public, written safer chemical policies. In addition, it found that “Costco was surprisingly the only major retailer that did not publicly report any progress in eliminating chemicals of high concern over the past three years.” The group warned retailers to ensure phased-out chemicals are not replaced with substances that have similar hazards or have not been closely evaluated.—MELODY BOMGARDNER