
525 Science Drive
Madison, WI 53711
www.cellulardynamics.com

## Fast Facts

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| Founders: | Craig T. January, Timothy J. Kamp, Robert Palay, Thomas Palay, Igor Slukvin, James A. Thomson |
| Date Founded: | 2004 |
| Employees: | 90 |
| Headquarters: | Madison, WI |
| Revenue: | N/A |
| University: | University of Wisconsin - Madison |
| Federal Funding Agency: | National Institutes of Health |
| Initial Research Funding: | N/A |

Cellular Dynamics International, Inc. (CDI) is a leading developer of stem cell technologies for in vitro drug development, in vivo cellular therapeutics, and stem cell banking. CDI harnesses its unique manufacturing technology to produce differentiated tissue cells in industrial quality, quantity and purity from any individual's stem cell line created from a standard blood draw. CDI was founded in 2004 by Dr. James Thomson, a pioneer in human pluripotent stem cell research at the University of Wisconsin-Madison.

CDI has commercialized iCell™ Cardiomyocytes, iPS cell-derived heart cells, with several other cell types in development, including hepatocytes, neurons, and endothelial cells. The company's mission is to become the leader in producing industrial quantities of any cell type in the human body produced from a biological sample of any genetic background.

## The Story Behind the Company

Cellular Dynamics is today a consolidation of three separate Wisconsin Alumni Research Foundation (WARF) start-up companies – the original Cellular Dynamics International, Stem Cell Products and iPS Cells Inc. – which were merged together into a single company in July of 2008. All three companies were founded with UW inventor Dr. James Thomson. Federally funded research developed by Dr. Thomson was licensed to the company.

Initial and ongoing funding for Dr. Thomson's research is provided by the National Institutes of Health.


3571 Anderson Street
Madison, WI 53704
www.virent.com

## Fast Facts

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| Founders: | Randy D. Cortright, James A. Dumesic |
| Date Founded: | 2002 |
| Employees: | 120 |
| Headquarters: | Madison, WI |
| Revenue: | N/A |
| University: | University of Wisconsin - Madison |
| Federal Funding Agency: | Department of Energy |
| Initial Research Funding: | $27.5M |

Virent is replacing crude oil by creating the chemicals and fuels the world demands through utilization of a wide variety of naturally occurring, renewable resources. The company's patented BioForming® technology features catalytic chemistry, which converts plant-based sugars into a full range of hydrocarbon products identical to those made from petroleum, including gasoline, diesel, jet fuel, and chemicals for plastics and fibers. Virent produces its hydrocarbon chemicals and fuels from plant sugars in a few hours, compared to the millions of years required for petroleum.

The company has key strategic relationships in place with Royal Dutch Shell, Cargill and Honda to add vital resources and expertise required to accelerate commercialization of its technology.

## The Story Behind the Company

Virent's Aqueous Phase Reforming (APR) technology was discovered by Dr. Randy D. Cortright and Dr. James A. Dumesic at the University of Wisconsin-Madison. Their discovery showed that it was possible to convert aqueous solutions of oxygenated compounds such as ethylene glycol, glycerol, sorbitol, and corn sugar over heterogeneous catalysts and generate either hydrogen or non-oxygenated hydrocarbons depending on catalyst composition and reaction conditions. The generated hydrogen could be used as either a fuel or chemical, and the non-oxygenated hydrocarbon could be used as either a fuel gas or liquid transportation fuel. The initial discovery of APR at the University of Wisconsin – Madison was funded by a grant from the Department of Energy's Basic Energy Science Group.

These initial discoveries were patented by the Wisconsin Alumni Research Foundation (WARF). Shortly after Cortright and Dumesic founded Virent in June 2002, the company obtained an exclusive license for the APR technology from WARF. Today, Virent has grown now to 130 employees and has extended the utility of the APR technology for the generation of chemicals, gasoline, jet fuel, and diesel fuel.