

# AI News Digest

02/23/2026 - 03/01/2026

WEEKLY DIGEST: BIOLOGICAL & BIOMEDICAL SCIENCES

## AI Revolutionizes Drug Discovery and Cancer Research

Recent advancements in artificial intelligence are significantly transforming the fields of drug discovery and cancer research. The launch of LillyPod, an AI factory equipped with over 1,000 NVIDIA GPUs, aims to accelerate medical advancements and enhance genomic research. Meanwhile, a new AI-driven framework developed by researchers at the Broad Institute and ETH Zurich is set to improve the analysis of gene expression in cancer studies. These innovations highlight the growing intersection of AI technology with biological sciences, promising to yield faster and more effective medical solutions.

### KEY FINDINGS

- ✓ LillyPod is the first AI factory fully owned by a pharmaceutical company, utilizing over 9,000 petaflops of computing power.
- ✓ An AI framework developed by MIT and ETH Zurich enhances gene expression analysis in cancer research.
- ✓ A nationwide study links higher cancer death rates to proximity to nuclear power plants.

### IMPLICATIONS

- The integration of AI in drug discovery could lead to faster development of new therapies.
- Enhanced analysis of gene expression may improve cancer treatment strategies.
- Findings on cancer death rates near nuclear plants could influence public health policies.

Key Metrics: LillyPod features 1,016 NVIDIA Blackwell Ultra GPUs.; The AI factory provides over 9,000 petaflops of computing power.; The study on cancer death rates is the first of its kind in the U.S.

## 1. AI to help researchers see the bigger picture in cell biology

**Category:** Research

**Departments:** Biological Sciences, Computer Science, Public Health Sciences

**Topics:** Healthcare AI, Gene Expression Analysis, Multimodal Data Integration, Cancer Research Framework

**Impact Score:** 26.0

**Rubric Scores**

Research Relevance: 5

Educational Value: 4

Innovation / Novelty: 5

Practical Impact: 5

Interdisciplinary Potential: 4

Ethical / Policy Implications: 3

Researchers at the Broad Institute of MIT and Harvard and ETH Zurich/Paul Scherrer Institute have developed an AI-driven framework to enhance the analysis of gene expression and other cellular measurements in cancer research. This framework identifies shared and unique information across different measurement modalities, allowing for a more comprehensive understanding of a cell's state. By integrating data from various techniques, the approach aims to streamline the analysis process, facilitating insights into disease mechanisms and the progression of conditions such as cancer and neurodegenerative disorders. The findings are published in *Nature Computational Science*.

<https://news.mit.edu/2026/ai-help-researchers-see-bigger-picture-cell-biology-0225>

## 2. Lilly Launches LillyPod NVIDIA DGX SuperPOD for Genomics and Drug Discovery AI

**Category:** Research

**Departments:** Pharmaceutical Sciences, Nursing, Biological Sciences, Computer Science

**Topics:** Healthcare AI, Genomics, Drug Discovery AI, AI Infrastructure

**Impact Score:** 23.0

**Rubric Scores**

Research Relevance: 4

Educational Value: 3

Innovation / Novelty: 5

Practical Impact: 5

Interdisciplinary Potential: 4

Ethical / Policy Implications: 2

Lilly has launched LillyPod, an AI factory powered by over 1,000 NVIDIA Blackwell Ultra GPUs, aimed at enhancing scientific research and accelerating advancements in medicine. This facility is notable for being the most powerful AI infrastructure fully owned and operated by a pharmaceutical company. The initiative is designed to improve the speed and accuracy of medical advancements, particularly in genomics and drug discovery.

<https://www.hpcwire.com/off-the-wire/lilly-launches-lillypod-nvidia-dgx-superpod-for-genomics-and-drug-discovery-ai/>

### 3. Now Live: The World's Most Powerful AI Factory for Pharmaceutical Discovery and Development

**Category:** Business

**Departments:** Pharmaceutical Sciences, Computer Science, Electrical & Computer Engineering

**Topics:** Healthcare AI, Pharmaceutical AI Factory, NVIDIA Blackwell Ultra GPUs, Accelerated Drug Discovery

**Impact Score:** 23.0

**Rubric Scores**

Research Relevance: 3

Educational Value: 4

Innovation / Novelty: 5

Practical Impact: 5

Interdisciplinary Potential: 4

Ethical / Policy Implications: 2

Lilly has launched LillyPod, the first AI factory fully owned and operated by a pharmaceutical company, aimed at accelerating medical advancements. This facility utilizes a DGX SuperPOD equipped with 1,016 NVIDIA Blackwell Ultra GPUs, providing over 9,000 petaflops of AI performance. The assembly of LillyPod was completed in four months, marking a significant step in enhancing computational capabilities within the pharmaceutical industry.

<https://blogs.nvidia.com/blog/lilly-ai-factory-live/>

### 4. Massive US study finds higher cancer death rates near nuclear power plants

**Category:** Research

**Departments:** Public Health Sciences, Nursing, Biological Sciences, Political Science & Public Administration

**Topics:** Healthcare AI, Cancer Risk Assessment, Environmental Health Impact, Epidemiological Modeling

**Impact Score:** 21.0

**Rubric Scores**

Research Relevance: 3

Educational Value: 2

Innovation / Novelty: 3

Practical Impact: 4

Interdisciplinary Potential: 4

Ethical / Policy Implications: 5

A nationwide study by researchers at the Harvard T.H. Chan School of Public Health has found that U.S. counties closer to operating nuclear power plants (NPPs) exhibit higher cancer death rates compared to those farther away. This study, the first of its kind in the 21st century to analyze data across all U.S. counties, estimates that approximately 115,000 cancer deaths from 2000 to 2018, or about 6,400 annually, are associated with proximity to NPPs, particularly affecting older adults. While the findings suggest a measurable cancer risk linked to living near NPPs, the authors caution that the study does not establish causation and recommend further research to explore the health impacts of nuclear power. Limitations include the lack of direct radiation measurements and the assumption that all NPPs have the same potential health effects.

<https://www.sciencedaily.com/releases/2026/02/260224015537.htm>

## 5. Scientists turn methane into medicine in stunning breakthrough

**Category:** Research  
**Departments:** Chemistry & Biochemistry, Pharmaceutical Sciences, Biological Sciences, Electrical & Computer Engineering  
**Topics:** Science & Research, Supramolecular Catalysis, Selective Allylation, Sustainable Chemical Production, Natural Gas Utilization

**Impact Score:** 17.0

**Rubric Scores**

|                       |                                |                                  |
|-----------------------|--------------------------------|----------------------------------|
| Research Relevance: 3 | Educational Value: 2           | Innovation / Novelty: 4          |
| Practical Impact: 4   | Interdisciplinary Potential: 3 | Ethical / Policy Implications: 1 |

A research team led by Martín Fañanás at the University of Santiago de Compostela has developed a novel method to convert methane and other natural gas components into valuable chemical building blocks, including the bioactive compound dimestrol, used in hormone therapy. This breakthrough, published in *Science Advances*\*, utilizes a specialized iron-based supramolecular catalyst to facilitate selective allylation while minimizing unwanted chlorination byproducts. The process operates under mild conditions and is powered by LED light, highlighting its potential for sustainable chemical production. This work is part of a broader initiative supported by the European Research Council to enhance the utility of natural gas in the chemical industry.

<https://www.sciencedaily.com/releases/2026/02/260227071916.htm>

## 6. Iron outperforms rare metals in stunning chemistry advance

**Category:** Research  
**Departments:** Chemistry & Biochemistry, Pharmaceutical Sciences, Biological Sciences, Electrical & Computer Engineering  
**Topics:** AI in Chemistry, Iron-Based Photocatalysts, Asymmetric Synthesis, Sustainable Materials

**Impact Score:** 11.0

**Rubric Scores**

|                       |                                |                                  |
|-----------------------|--------------------------------|----------------------------------|
| Research Relevance: 0 | Educational Value: 0           | Innovation / Novelty: 4          |
| Practical Impact: 4   | Interdisciplinary Potential: 3 | Ethical / Policy Implications: 0 |

Researchers at Nagoya University have developed a new iron-based photocatalyst that significantly reduces the reliance on expensive chiral ligands, cutting their usage by two-thirds while maintaining efficiency. This catalyst, which operates under blue LED light, enables the first total asymmetric synthesis of the natural compound (+)-heitziamide A, known for its respiratory burst suppression properties. The innovative design combines affordable achiral bidentate ligands with chiral ligands to enhance catalytic performance and control the three-dimensional configuration of products. This advancement in iron-based photocatalysis has implications for the synthesis of complex pharmaceutical compounds using more sustainable materials.

<https://www.sciencedaily.com/releases/2026/02/260227061821.htm>

## 7. This plastic is made from milk and it vanishes in 13 weeks

**Category:** Research

**Departments:** Civil, Environmental & Construction Engineering, Biological Sciences

**Topics:** Sustainable Materials, Biodegradable Plastics, Food Packaging Solutions, Environmental Impact Assessment

**Impact Score:** 10.0

**Rubric Scores**

Research Relevance: 0

Educational Value: 0

Innovation / Novelty: 3

Practical Impact: 4

Interdisciplinary Potential: 3

Ethical / Policy Implications: 0

Researchers at Flinders University have developed a biodegradable film using calcium caseinate, modified starch, bentonite nanoclay, glycerol, and polyvinyl alcohol, aimed at providing an environmentally friendly alternative to conventional plastics. The study, published in *\*Polymers\**, demonstrated that the material decomposes in soil within approximately 13 weeks, indicating its potential for sustainable food packaging applications. Microbial testing showed that bacterial levels remained within acceptable limits, suggesting low toxicity. The research highlights the importance of finding biodegradable alternatives to reduce plastic pollution, particularly in single-use food packaging.

<https://www.sciencedaily.com/releases/2026/02/260227071922.htm>