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# Welcome Letter from the Editor | Open Access

## Introducing The ConductScience Journal

Dear Colleagues and Friends,

Welcome to the inaugural issue of **The ConductScience Journal**, a publication born out of our shared vision for a more dynamic, transparent, and data-rich scientific landscape. In an era when over two million biomedical articles are published annually—supported by more than \$40 billion in research funding from the National Institutes of Health (NIH)—it is both astonishing and concerning that so many discoveries are still encapsulated in static PDFs or minimal HTML pages [\[2\]](#),[\[3\]](#). This outdated format obscures the true depth of modern research, reducing interactive figures, semantic detail, and critical context to mere afterthoughts [\[4\]](#)–[\[6\]](#).

Here at *The ConductScience Journal*, we believe that **every** study—regardless of its perceived "impact"—deserves an equal opportunity for visibility, scrutiny, and reuse. Our editorial priorities

rest on **rigor and integrity**, ensuring that all research meeting our quality standards has a place in the scholarly record. By preserving the depth and nuance of each study, we safeguard not just the information itself, but also the pathways for future investigation and collaboration [\[7\]](#).

## A Transformative Vision for Scientific Publishing

Traditional publishing models, while instrumental in the past, have not kept pace with the ever-growing complexity of research data. **Our mission** is to ensure that vital discoveries remain accessible and enriched with contextual layers that foster advanced analytics, reproducibility, and integrative science. We do this by embracing the NIH Data Management and Sharing (DMS) Policy and centering our approach around the FAIR principles—Findable, Accessible, Interoperable, and Reusable [\[1\]](#).

When you publish with *The ConductScience Journal*, your work becomes more than a static document. Our system infuses manuscripts with machine-readable metadata, bridging your findings with cutting-edge computational tools, automated annotation services, and interdisciplinary communities. We envision a future in which scientists no longer wrestle with reformatting data from older papers but instead access seamlessly interconnected datasets at the touch of a button.

## Semantically Enriched Publications and FAIR Data

Scientific progress relies on **more than** open availability. It demands that research data be presented in ways that facilitate discovery, cross-disciplinary integration, and repeated use. While the traditional article format has served us for centuries, the scale and diversity of modern datasets—spanning everything from molecular signatures to large clinical cohorts—call for a **new type of publication** [\[4\]](#)–[\[6\]](#).

By automatically tagging biomedical concepts with standardized vocabularies (e.g., UMLS, VSAC, RxNorm, SNOMED CT), we transform conventional manuscripts into **living documents**. These semantically enriched articles can be directly interpreted by computational pipelines and easily navigated by human readers, dramatically reducing the need for cumbersome, manual data extraction. Yet our ambitions extend well beyond basic text annotations:

- **Genomic Data**

Advances in genomics have unlocked unprecedented insights into disease mechanisms and personalized medicine. Our roadmap incorporates support for genomics metadata standards—ensuring that variant identification, sample provenance, and functional annotations remain structured and easily searchable.

- **Imaging and Radiological Data**

From clinical MRI scans to microscopic imaging, visual data are central to many fields. By integrating protocols such as DICOM, we aim to link raw image files, regions of interest, and relevant metadata, creating **interactive figures** that fuel AI-driven diagnostics and large-scale comparative analyses.

- **Clinical Trial and Patient-Centric Data**

As patient populations and clinical outcomes become more integral to research, aligning with frameworks like CDISC or HL7 FHIR ensures that published data can be readily pooled and scrutinized, guiding everything from systematic reviews to policy decisions.

- **Electrophysiology, Environmental, and Specialized Fields**

The scientific universe is vast, and we are committed to serving specialized domains such as EEG/MEG research, environmental monitoring, and more. Our goal is to embed data standards that ensure no dataset is left behind.

By infusing these standards into the publishing process, we dismantle the silos that have historically constrained meta-analyses and cross-study comparisons. The result? A world in which large-scale data pooling, machine learning, and real-time data comparisons become **the norm**, accelerating discovery and empowering researchers to turn raw observations into actionable insights.

## Innovation Beyond Traditional Models

At the heart of our publication model is a commitment to **value and empowerment** for the scientific community:

- **Compensated Peer Review and Open Dialogue**

We believe that peer reviewers should be recognized and rewarded for their expertise. Our process includes fair compensation, and we encourage open commentary—published alongside the article—to enrich the academic conversation and promote transparency.

- **Scientist-Centric Journal Creation**

For research teams with a vision of shaping their own editorial mission, our platform offers the opportunity to establish and manage new journals. By allowing flexible open-access fees and sharing revenue, we champion academic entrepreneurship in a traditionally publisher-driven industry.

- **Rapid Reviews and Broad Accessibility**

Through agile workflows, we streamline submission, review, and publication, ensuring that robust findings move quickly from the bench to the broader scientific community. In this way, we combine speed with rigor, ushering in a new era of timely knowledge exchange.

## The ConductScience Mission

As part of the broader [ConductScience](#) initiative, our journal is one facet of a holistic ecosystem dedicated to **innovation, reproducibility, and interdisciplinarity**. We bridge the gap between published research and the tangible tools or services that drive it forward—connecting authors and readers to resources that can catalyze further discovery.

## Looking Ahead

With this **inaugural issue**, we invite you to witness how semantically enriched publications, rigorous peer review, and forward-thinking financial structures can **reshape** the way we share and utilize scientific findings. Our aim is to cultivate a publishing environment where every piece of research—be it a pilot study or a large-scale trial—obtains the visibility and detailed, data-rich context it deserves.

On behalf of our entire editorial team, **thank you** for joining us on this journey. We welcome your submissions, collaborations, and insights as we strive to build a future where **every discovery is a living asset**, continuously fueling scientific innovation and practical applications around the globe.

Sincerely,

*Editor-in-Chief & The ConductScience Journal Editorial Board*

## Abbreviations Used

- **DMS**: Data Management and Sharing
- **FAIR**: Findable, Accessible, Interoperable, Reusable

- **NIH**: National Institutes of Health
- **PaaS**: Platform-as-a-Service
- **SaaS**: Software-as-a-Service
- **UMLS**: Unified Medical Language System
- **VSAC**: Value Set Authority Center

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