Research Strategy 2025–2028

Prof. Luzius Bernhard, Head of Research
Department of Digital Arts (DK) – University of Applied Arts Vienna

A Laboratory for the Unknown
Research at the Department of Digital Arts is not about following trends, producing predictable outputs, or illustrating already-settled ideas. It is about constructing realities from conditions of uncertainty.

Our field is digital arts, but our goal is the invisible — phenomena, aesthetics, and systems that do not yet exist in artistic, cultural or scientific discourse. We are a pre-experimental cluster and distributed lab for the unknown — a structure where artists operate like physicists, biologists, and OSINT analysts, producing outcomes that even the supervisors or the head of the department do not fully understand.

We are not here to 'express' ourselves.

We are here to find out what happens when artists think like scientists, secret service investigators, finance bros or political

consultants. If you want safe, incremental results, look elsewhere. If you want to change the parameters of what can be thought of, talk to us.

Pre-Experimental Systems (Research Philosophy)
We focus on pre-experimental research — work that precedes the hypothesis, where outcomes are unknown and methods are still fluid. This is the phase where you are not 'testing' but inventing the thing to be tested, the method and instruments and the experiments.

In the sciences, this stage is often invisible. In art, it is often undervalued. Here at DK, it is the core. We treat pre-experimental activity as a generative engine for the department, an arena where new languages, tools, and knowledge architectures are forged. The purpose: to set conditions in which impossible questions can be asked.

Not what this art work looks like, but what structures must exist for unimaginable things to become real, to force the collision of disciplines, logics, and temporalities. This is not about predicting outcomes, but about engineering contexts. Research is less a search for answers than a deliberate destabilization of what counts as possible, replacing certainty with generative volatility.

The Hyper-Contemporary Lab Structure
The department is a living nexus, a charged constellation of autonomous experimental labs—each an uncompromising intellectual, aesthetic, and technical node, wired for collision, exchange, and the relentless invention of what does not yet exist.

We appropriate structural intelligence from existing configurations: precision in team structure, clarity in resource allocation, and ruthless focus on foundational questions.

Each lab is led by a Principal Investigator (PI) responsible for theme definition, research questions, team assembly, mentoring, technical aspects, budget & funding, and research project execution.

- **AI Lab** – Pattern recognition, influence architectures, prompt literacy, speculative models, and unethical machine aesthetics *(Lead: Luzius Bernhard)*
- **Investigative Lab** – Data research, forensic aesthetics, whistleblowing, speculative leaks and storytelling *(Lead: Julian Hessenthaler)*

- **Bio Lab** – Post-organic processes, biopolitics, material ecologies, living systems *(Lead: Stefan Fischer)*
- **3D Lab** – Digital sculpture, experimental manufacturing, world-building, speculative design, virtual environments *(Lead: Stefan Fischer)*
- **Electronics Lab** – Sensorics, tactile interfaces, signal aesthetics, feedback systems, circuit bending, signal experiments *(Lead: Stefan Fischer)*

- **Sound Lab** – Ambisonics, auditory storytelling, sonic fiction, acoustic body modulation *(Lead: Nicolaj Kirisits)*
- **Immersive Lab** – Spatial media, mixed sensory environments, hyper immersion, cognitive overload *(Lead:*

Josephine Freiberg)

- **Science Visualization Lab** – Data-driven visualization, translating science into (visual) art *(Lead: Martina Fröschl)*

Strategy and Roles

- **Head of Research** – Strategic direction, HR oversight, funding acquisition, cross-lab integration, international partnerships, curriculum shaping.
- **Lab Leads / PIs** – Theme definition, research questions, mentoring, team leadership, securing lab-specific funding, designing experiments, teaching.
- **Research Fellows / Postdocs** – Independent research within specific or cross-lab context, method development, high-risk experimentation, publications (var media).
- **Research Assistants** – Embedded participation in lab processes, co-development of experiments, platforms and publication (i.e. Speed Shows and essays).
- **Students** – Pre-Experimental Explorers, Weird ideas and strange questions.
- **External Partners** – Artists, scientists, activists, and technologists brought in for targeted knowledge transfer and field-specific experimental collaboration.

Research Questions (Selection)

We frame research not as topics but as antitheses in polarized fields, designed to destabilize consensus and force the articulation of unseen assumptions. Methods emerge as hybrid

constructs — part forensic analysis, part speculative modeling — where contradictory logics are held in tension to generate new forms of knowledge production:

1. How can AI be operationalized as an active cognitive sovereignty actor — capable of exposing, mapping, and counteracting multi-domain symbolic influence architectures — rather than serving as a neutral or purely productive system?
2. What new modes of understanding and conception of the world emerge when OSINT (Open Source Intelligence) merges with speculative leaks and narration in investigative art and research?
3. How can distributed research structures — Signal groups, anonymous darknet forums, open science networks, different political systems — become sites of aesthetic production?
4. How can artistic publication survive and adapt in conditions of limited free speech and censorship at home and abroad and what aesthetic, ethical, and political possibilities exist in designing machines whose outputs are intentionally beyond human comprehension?

Methods

Our anti-disciplinary and intentionally unstable methodology combines art's capacity for ambiguity with science's demand for rigor.

- **Pre-Experimental Procedures** – Open exploration without predefined goals or output formats.

- **Speculative Storytelling** – Using narrative as a probe into hypothetical futures and counterfactual histories.
- **AI-Assisted Research** – Using machine learning not for automation, but for *misuse* in pattern detection, anomaly recognition, and generative speculation.
- **Open Formats** – Speed Shows, lab sessions, and public prototypes for rapid, risky iteration.
- **Mixed Methods** – From data scraping to sensory fieldwork, from material prototyping to distributed network action.

Activities, Formats & Visibility

Our methodology merges art's capacity for ambiguity, subversion, and affect with science's demand for precision, reproducibility, and deep structural inquiry. Research questions function less as points of arrival than as triggers for cascades of speculative, contradictory, and often uncomfortable investigations.

- **Lab Residencies & Open Labs** – Temporary embedded researchers from inside and outside the department.
- **Speed Shows** – One-day events where experiments are shown in raw, unpolished form; ideas are stress-tested live (Show Platform: Immersive Lab).
- **Cross-Lab Experiments** – e.g., Biolab + Immersive Lab producing living ecosystems in hybrid space.
- **Publications & Essays** – Different publishing formats blending critical writing, speculative fiction, and research documentation.
- **Workshops & Panels** – Inviting guests from art, theory, activism, business and high-risk tech. The department is a

site for international discourse on speculative, post-disciplinary research.
- **Curricular Integration** – Labs as living classrooms where students produce low-level original research within their degree work as starting point for long-term high-level research projects.

Visibility is not an afterthought; it is a research tool. Scientific communication translates complex findings into shared language. Artistic communication does the same — but with the license to remain unresolved, to affirm rather than conclude.

Our outputs are communicable but destabilizing. We use visibility strategically — to infiltrate discourse, shift perception, and build public literacy in the invisible forces shaping our reality.

Expected Outcomes (2025–2028)

1. **Methodological Innovation** – Development of hybrid artistic-scientific approaches that do not exist elsewhere.
2. **Institutional Model** – Positioning the Department of Digital Arts as a global reference point for speculative lab-based art & research.
3. **Network Building** – Creation of a durable ecosystem of labs, fellows, and international partners.
4. **Impact on Discourse** – Shaping debates on AI, biopolitics, post-truth media ecologies, and machine aesthetics through art.

5. **Disruptive Outputs** – Genres, platforms, and systems that enter both artistic and scientific conversation — not as illustrations, but as synthetic design.

The Radical Core

The role of this department is not to react to the world, but to change the parameters by which the world can be understood. That means not reinforcing disciplinary silos, but creating unstable collaborations that produce outcomes no single field would claim.

The lab structure is a vector architecture against stagnation — a way to prevent the department from falling into comfort zones or predictable styles. It forces collisions, demands translation across a spectrum of languages, and rewards the capacity to operate under uncertainty.

If we succeed, the department will not produce 'projects' or 'works,' but new categories of thought, art beyond practice, structures and infrastructures. In 'elite' and most advanced scientific ventures, most important breakthroughs happen in liminal zones — before something is recognized as a 'field,' before there is a name for it.

Our job is to inhabit that space permanently.