Gheorghe Giurgiu
Bucharest, Romania
www.deniplant.com | www.giurgiugheorghe.ro
giurgiu@deniplant.ro | +40771235994
07.09.2026

To:
ARIA Recruitment Team Advanced Research and Invention Agency (ARIA)
London, United Kingdom

Subject: Application for ARIA Programme Director – Next-Generation Multi-JAK/TYK2 Asymmetric Inhibitors Portfolio

Dear Members of the ARIA Selection Committee,

I am writing to express my strong interest in joining the Advanced Research and Invention Agency (ARIA) as a Programme Director.

With over two decades of experience leading translational biomedical research at the intersection of phytotherapy, immunology, and metabolic health, I have dedicated my career to turning complex biological insights into functional health solutions. I am eager to leverage this experience to design and lead an ambitious ARIA program focused on Next-Generation Asymmetric Multi-JAK/TYK2 Inhibition via Natural Nanoparticles.

The current landscape of treating immune-mediated diseases (such as Psoriasis, Lupus, and severe Atopic Dermatitis) is bottlenecked by a brutal medical trade-off. While synthetic pan-JAK inhibitors offer clear clinical efficacy, they are heavily constrained by severe systemic toxicities—such as anemia, thromboembolism, and profound immunosuppression—due to indiscriminate binding.

My proposed ARIA program aims to break this deadlock by shifting the paradigm from a reactive treatment of clinical symptoms to an engineering-driven model of context-dependent, real-time homeostatic maintenance via plant-derived, highly targeted, asymmetric biomodulation.

Crucially, this program does not start from abstract theory. I have developed a proprietary Minimum Viable Product (MVP) and established a solid Proof of Concept (PoC) based on natural formulations that have already demonstrated profound real-world clinical efficacy across a cohort of dozens of chronic patients. This baseline matrix, which has previously undergone successful external clinical testing at the Special Clinic of Neukirchen in Germany, significantly lowers initial R&D risks.
By deploying this existing operational foundation, our ARIA portfolio will drastically compress early-stage molecular screening timelines and achieve unprecedented cost-efficiencies as we transition to formalized clinical validation.

If appointed as an ARIA Programme Director, I will build and oversee a high-reward R&D portfolio structured around three major breakthrough pillars:

1. **Asymmetric Selectivity via AI & In Silico Screening:**具 Orchestrating advanced deep-learning architectures (such as AlphaFold 3) to map and isolate

natural bioactive compounds that exhibit high, context-dependent inhibition on JAK1 and TYK2 (to suppress type I Interferon and IL-23/IL-17 pathways), while preserving (sparing) JAK2/JAK3 to protect normal hematopoiesis, lymphopoiesis, and baseline antiviral defenses.

2. **Advanced Botanical Nanomedicine:** Scaling novel delivery mechanisms, specifically a natural plant-based nanoparticle syrup and high-absorption oral liquids leveraging plant-derived extracellular vesicles (botanical exosomes), to maximize localized epidermal and systemic therapeutic indices without toxic plasmatic peaks or organ-specific toxicities.
3. **Streamlined Clinical Translation:** Driving an aggressive, multi-phase R&D pipeline (from computational and structural in-silico modeling to Phase I-III clinical trials) in coordination with regulatory frameworks like the EMA and FDA to establish rigorous Risk Management Plans (RMP) and pioneer adaptive algorithmic treatment validations with the MHRA.
4.

To explicitly demonstrate how these high-risk biological concepts can be rigorously de-risked, budgeted, and translated into a sovereign green biopharmaceutical manufacturing capability within the United Kingdom, I have published a comprehensive operational, strategic, and macro-budgetary blueprint for this investment.
The complete program architecture, data-driven "Why Now?" convergence timeline, and cross-disciplinary governance models can be thoroughly reviewed on our dedicated portal at:https://deniplant.com/modulation-of-human-physiology/

ARIA is uniquely positioned to fund the unconventional, high-risk spaces that traditional venture capital and conservative academic institutions avoid.
My background as an independent researcher and entrepreneur has taught me how to operate with agility, challenge established pharmaceutical dogmas, and maintain a sharp focus on direct-to-patient outcomes. I possess the cross-disciplinary language needed to unite computational biologists, phytochemists, clinical trialists, and regulatory experts under one cohesive vision.

I am fully prepared to embrace the responsibilities of this role, including a sustained physical presence at ARIA’s London headquarters, to build a world-class research ecosystem that redefines the future of autoimmune therapeutics.

Thank you for your time and consideration. I welcome the opportunity to discuss how this program can establish the UK and ARIA as global leaders in next-generation botanical nanomedicine.

Sincerely,
Gheorghe Giurgiu
Founder, Deniplant Biomedical Center
www.deniplant.com