Lot number	Title project / summary	Contact
1	**Lipid nanoparticle-mediated mRNA delivery in healthy and diseased hearts** Heart failure is a serious condition that results from the extensive loss of specialized cardiac muscle cells called cardiomyocytes (CMs), typically caused by a myocardial infarction (MI). Messenger RNA (mRNA) therapeutics are emerging as a very promising gene medicine for regenerative cardiac therapy. To date, lipid nanoparticles (LNPs) represent the most clinically advanced mRNA delivery platform. Yet, their delivery efficiency has been limited by their endosomal entrapment after endocytosis. Previously, Kros demonstrated that a pair of complementary coiled-coil peptides (CPE4/CPK4) triggered efficient fusion between liposomes and cells, bypassing endosomal entrapment and resulting in efficient drug delivery. The Kros group modified mRNA-LNPs with the fusogenic coiled-coil peptides and demonstrated efficient mRNA delivery in cardiomyocytes. As proof of in vivo applicability of these fusogenic LNPs, local administration via intramyocardial injection led to significantly enhanced mRNA delivery and concomitant protein expression. This represents the successful application of the fusogenic coiled-coil peptides to improve mRNA-LNPs transfection in the heart and provides potential for the advanced development of effective regenerative therapies for heart failure. In this KIEM grant we will further explore RNA delivery to heart tissue using the unique Miniature Tissue Culture System (MTCS) developed by Dr Kruithof (LUMC) to study the delivery of potential therapeutic mRNA to healthy and diseased heart ex vivo, and to identify novel ways to target diseased tissue selectively.	Prof.dr. Alexander Kros, a.kros@chem.leidenuniv.nl
2	**Post-translational collaboration to regulate the DNA damage response** The proposal aims to establish a collaborative pilot project between the Filippov group (LIC) and the van der Heden van Noort group (LUMC). The goal of the project is to initiate studies on the molecular mechanisms of the cross-talk between ADP-ribosylation and ubiquitination of proteins in the DNA damage response. These processes are post-translational modifications crucial for regulating protein function in living cells and have implications in various pathologies such as cancer, bacterial infections, and age-related diseases. However, the molecular mechanisms of the interplay between ADP-ribosylation and ubiquitination, especially in the context of DNA-damage response, are poorly understood. The participating research groups have expertise in the area of bioorganic chemistry of ADP-ribosylation (Filippov) and ubiquitination (van der Heden van Noort). They plan to combine forces to study the cooperation of these two biological processes by synthesizing advanced ubiquitinylated ADP-ribose derivatives and applying them in structural biology studies of the DELTEX- and RNF-E3 ligase enzyme classes, which function as a bridge between ADP-ribose and ubiquitin. This pilot project aims to demonstrate the feasibility of synthesizing the hybrid ADPribose-ubiquitin molecular constructs and to prove their usefulness as probes in the structural studies of DELTEX2 and RNF114.	Dr. D.V. Filippov, filippov@lic.leidenuniv.nl
3	**CliRes: climate resilience in Maasailand** Climate change has huge impact on local communities, in particular in the Majority World where people often strongly depend on their direct environment for their livelihood. In Kenya and Tanzania, Maasai communities face climate change related issues in terms of flooding—reducing mobility and increase crop failure—and drought—reducing water availability and forage for livestock. This project aims to increase the climate resilience of Maasai communities by bringing together expertise from the environmental science and social sciences. The overall aim is to co-create a research agenda with Maasai people and other local actors that can be used for the coming decade for MSc projects as well as larger funding applications. The overall goal of this research project is to contribute to increasing environmental and ecological resilience to climate change of communities that are hit the hardest.	Michiel P. Veldhuis, m.p.veldhuis@cml.leidenuniv.nl
4	**PILOT: "Powerful high-throughput assay for Identifying Ligands Of Tertiary RNA Structures"** The COVID-19 global pandemic has underscored the urgent need for transformative strategies in the quest for new antiviral agents. Targeting complex RNA structures presents an exciting opportunity for developing innovative anti-infective agents. This research proposal outlines a comprehensive approach to discover new ligands for a SARS-CoV-2 G-quadruplex using a cutting edge high-throughput competitive binding assay that has recently been developed at the Leiden Institute of Chemistry (LIC). This competitive binding assay will be used for a high-throughput screening campaign, making use of the high-throughput screening facility and expertise at the Leiden University Medical Centre (LUMC) to find new ligands, which will subsequently be validated and optimized at the LIC. The results of this study will contribute to the development of novel antivirals, ultimately addressing the urgent need for new therapeutic modalities for bacterial and viral infections.	Sophie Wintermans, s.e.l.wintermans@lic.leidenuniv.nl

5	**Empowering Academics as Climate Leaders: An Evidence-Based Workshop Series** As the climate crisis intensifies, many academics feel a responsibility to take a leading role in driving the transformative changes needed. The lead applicant has previously developed the "academic doughnut" model, which adapts Kate Raworth's Doughnut Economics framework to envision an academia that provides a just social foundation while respecting human and planetary boundaries. Based on this model, the applicants have created a workshop to empower academics to identify and change unsustainable practices. The workshop has generated significant international interest, with invitations to present globally and coverage in major media outlets. However, its reach has been limited by time constraints and lack of evidence-based evaluation. With this KIEM grant we will professionalize and scale up the workshops, rigorously evaluate its long-term impacts, and integrate the ideas with ongoing sustainability initiatives at Leiden University. The core research question is: can we change the culture of academia to move towards human and planetary sustainability? The project will involve developing shareable workshop materials, hosting regular workshops, conducting longitudinal interviews to assess impacts on participants' scholarly outputs, and embedding the ideas into existing networks such as Open Science communities. With a diverse team of academics from multiple faculties, the project is well-positioned to drive bottom-up cultural change towards sustainability across academia. By empowering academics as climate leaders, this work aims to mobilize the full potential of universities to address the defining challenge of our time.	Anne Urai, a.e.urai@fsw.leidenuniv.nl
6	**Going viral: leveraging friendly viruses to fight cancer** Oncolytic virotherapy makes use of viruses that specifically eradicate cancer cells, while sparing normal cells. Additionally, they elicit a potent anti-cancer immune response that helps eradicate the tumor. They represent a promising anti-cancer therapy, especially for difficult-to-treat cancers, and the clinical interest in oncolytic viruses is rapidly expanding. Importantly, clinical studies have shown mixed results with patients showing varying degrees of responses, suggesting a lack of optimal oncolytic virus dosing. Due to their living nature, oncolytic viruses exhibit a unique mode of action, distinct from traditional therapeutics that is associated with complex interactions with tumor cells and host immunity, resulting in unique yet poorly understood pharmacokinetic (PK) and pharmacodynamic (PD) properties. Heterogeneity and stromal cells within tumors further add onto this complexity. A comprehensive understanding of the complex PK/PD properties of oncolytic virotherapy is crucial for optimizing dosing strategies. This project will integrate both experimental and computational methods to comprehensively study the distribution and dynamics of oncolytic virotherapy within tumors. High-quality experimental data, generated in close-to-patient models, will inform the development of mathematical pharmacological models to quantitatively describe the PK/PD and dose-response relationships during oncolytic virotherapy. This will provide a stepping stone to optimize oncolytic virotherapy dosing strategies and facilitate preclinical-clinical translation in oncolytic virotherapy development.	Vera Kemp, PhD, v.kemp@lumc.nl
7	**Integrated chemistry demonstrations to enlighten and inspire** Chemistry is a study of reactions, of things happening, of the world around us. Surprisingly, much of our teaching is done through classical means: books, lectures, and written exercises. Very few actual demonstrations of the studied subject matter are ever presented in class, while research has shown that these can have significant impact in the engagement of students and thus the retainment of knowledge. With this proposal, we aim to bring real chemistry back into the lecture hall by investing in both time and equipment to design and integrate high quality chemical demonstrations in the first year BSc course General and Inorganic Chemistry of the MST Bachelor. We are partnering with LLInC for their knowhow on both the out-of-the-ordinary teaching experience, as well as the option to include interactive educational technologies to assess the quality and impact of the renewed demonstrations.	Dr. A.P.A. Janssen (Anthe), a.p.a.janssen@lic.leidenuniv.nl
8	**Bending the Biodiversity Curve: A Transdisciplinary Approach to a Global Crisis** We are experiencing unprecedented biodiversity loss, posing major risks to society and the environment. The biodiversity crisis is thus both an environmental and human crisis, central to the UN's Sustainable Development Goals and global restoration efforts. However, aligning global biodiversity and sustainability goals with local societal, economic and political interests poses significant challenges. To address this, a transdisciplinary approach is necessary, involving collaboration across scientific disciplines and societal sectors to address scaling issues across both time and space. Current theoretical approaches in biology, ecology, economy and governance seek universal principles, but often fall short due to the unique characteristics at different organizational levels, e.g. taxonomic, spatial and temporal alignment challenges, as well as cultural contexts. Instead, we propose a multi-perspective approach that respects these diversities and uses a transdisciplinary outlook to uncover various mechanisms and emerging principles. Addressing this requires integrating scientific objectives with societal needs, scaling science to action, and influencing diverse stakeholders. Transdisciplinary research should further connect scientific findings with local and global policy-making, fostering new governance structures. Our KIEM grant consortia bridges natural, social and governance sciences participants, with the aim to partly oversee organizing a transdisciplinary network (Leiden Biodiversity Network; LBN), research agenda workshops, as well as the formation of a high-impact paper after an international Lorentz Conference in February 2025. By doing so, this proposal would significantly contribute to bolstering the international visibility of the LBN and	Kathryn (Kat) Stewart, k.a.stewart@cml.leidenuniv.nl

	Leiden University, cementing transdisciplinary research agendas, and create a publication for future global action on the biodiversity crisis.	
9	**“That’s precisely not how quantum works” – On the reception of metaphors on quantum science and technology** Quantum science and technology is an emerging field of physics. It is often framed as ‘spooky’ or ‘enigmatic’ and the recent developments in quantum technology are frequently narrowly described, both in terms of societal impact as well as in the possible applications (Meinsma et al., 2023). This might hinder societal engagement with quantum, while future developments in the field are envisioned to be ‘disruptive’ to society (Roberson, 2022). This project sets out to study possible ways to increase societal engagement with quantum science and technology through the use of metaphor. Metaphors are often used to communicate about complex, abstract topics such as quantum physics. Yet, not all metaphors are equally accepted: they can be questioned or even resisted for their underlying assumptions or limited comprehensibility (see Van Poppel & Pilgram, 2023, 2024; Wackers & Plug, 2022; Wackers et al., 2020, 2021). Until now, relatively scant attention has been paid to the (critical) reception of metaphors by different audience segments – even though this is an important issue when considering using metaphors as a strategy to communicate with a particular target audience. To determine how societal engagement with quantum science and technology might be enhanced by using metaphors, we will investigate the reception of metaphors on quantum, thereby focusing on what may trigger resistance to these metaphors amongst experts and laypersons. Distinguishing between these audiences will help determine how metaphors on quantum can effectively be used in science communication – meeting the preferences and expectations of both experts on quantum and laypeople alike.	Dunja Wackers, wackers@physics.leidenuniv.nl
10	**NNMT inhibitors as a novel treatment for atherosclerotic cardiovascular disease** Atherosclerosis refers to the development of lipid and cholesterol-rich plaques in artery walls and is the most prominent cause of life-threatening cardiovascular diseases (CVD). Current treatments focus on decreasing low-density lipoprotein-cholesterol (LDL-C), but the vast majority of treated patients achieve insufficient LDL-C lowering. Nicotinamide N-methyltransferase (NNMT) is a promising, but as of yet unexplored target for CVD through its role in lipid metabolism. The best-in-class small molecule NNMT inhibitors, developed at the Biological Chemistry Group of Leiden University, have revealed impressive reductions of cholesterol and triglyceride levels in APOE*3-Leiden.CETP mice, as performed by the Endocrinology group of the Leiden University Medical Center. This mouse model for human-like lipoprotein metabolism and atherosclerosis development is well established, and, in contrast to other mouse models, responds to classic LDL-C-lowering strategies such as statins and PCSK9 inhibitors. Treatment with our NNMT inhibitors resulted in significant reductions in circulating cholesterol as well as triglycerides after 4 weeks of treatment. With this application, we seek to translate the lipid-lowering effects of our NNMT inhibitors into an improvement in atherosclerosis to support their development as a differentiated treatment for cardiovascular disease. In order to do so, an extensive large scale mouse study will be performed in which the APOE*3-Leiden. CETP mice will be treated once every 2 days over a period of 12-16 weeks, followed by evaluation of atherosclerotic plaque formation. This study will provide important new insights into the effects of prolonged NNMT inhibition on circulating lipids and progression of atherosclerosis, and guide translational studies towards application in CVD.	Nathaniel I. Martin, n.i.martin@biology.leidenuniv.nl
11	**A crystal ball'?: Piloting a product to test the effects of future urban interventions on safety perception.** *Ervoor zorgen dat burgers zich veilig voelen in de stedelijke openbare ruimte is een belangrijk streven voor elke gemeente. Er wordt dan ook regelmatig ingegrepen in de stedelijke openbare ruimte. Dat gaat in veel gevallen gepaard met flinke investeringen. Denk bijvoorbeeld aan de implementatie van cameratoezicht, veranderingen in de dekking, intensiteit of toon van straatverlichting, of zelfs een gehele herinrichting van de stedelijke openbare ruimte. Het is dan ook wenselijk dat zulke interventies effectief zijn. Ze zouden zo veel mogelijk de veiligheidsgevoelens moeten bevorderen. Null- of averechtse effecten moeten voorkomen worden. Maar hoe beoordelen we het effect van een interventie op een betrouwbare wijze, nog voordat deze geïmplementeerd is? We kunnen daarbij natuurlijk veel leren van wetenschappelijk onderzoek. En we kunnen kijken naar situaties uit de praktijk, waar de specifieke interventie al eerder toegepast is. Dat geeft enige algemene, maar vaak weinig context specifieke, houvast.* *Binnen dit project verkennen wij een nieuwe, aanvullende methode om de potentie van toekomstige interventies in de stedelijke openbare ruimte te beoordelen. Daartoe worden fotorealistische 3D-scènes gecreëerd met behulp van Gausian Splatting technieken (zie hieronder), waarbinnen potentiële gebruikers blootgesteld worden aan de geplande interventie. Door de ervaringen van deze gebruikers met elkaar te vergelijken, kunnen we achterhalen of de interventie het beoogde effect heeft. Indien onze pilot bruikbaar blijkt, biedt dat beleidsmakers de mogelijkheid om tot een meer nauwkeurige afweging te komen hoe zij hun middelen inzetten.*	Jelle Brands, j.brands@law.leidenuniv.nl

12	**Interdisciplinary Conference on European Studies (ICES): Rethinking the EU in the Age of Crisis** This application concerns the organisation of an Interdisciplinary Conference on European Studies (ICES): Rethinking the EU in the Age of Crisis at Leiden University (May/June 2025), which will culminate in the publication of an edited volume (June 2026). This conference will be organised in the framework of the Europe Hub, the newly created platform for interfaculty and interdisciplinary cooperation on European and EU studies at Leiden University. Organised by four assistant professors from the Governance and Global Affairs, Humanities, Social Sciences and Law Faculties, this two-day conference is intended to bring together scholars from different fields of European studies. It will look at how Europe, and the EU specifically, deals with both internal and external crisis situations from different disciplinary perspectives. In accordance with Leiden University's 'Sector Plan 2022 Social Sciences and Humanities' and University's evolving Brussels strategy, the suggested conference is intended to fulfil four aims: (1) contribute to excellent research on societal challenges; (2) foster a new interdisciplinary research agenda on EU Studies at Leiden University; 2) generate synergy among scholars working on the EU at Leiden University; and 4) link Leiden University with the policy world in Brussels by bringing together policymakers and academics during an intensive two-day conference.	Dr. Vincent Delhomme, v.n.delhomme@law.leidenuniv.nl
13	**SMART: Synthesis of Mechanism-based Antiviral Rational Therapeutics: ER a-Glucosidase II Inhibitors** SMART project aims to develop new, effective, and selective inhibitors for a-glucosidases, which play vital roles in biological functions and disease pathways, and are important for the replication of several viruses. The urgency of this research is underscored by the recent SARS-CoV-2 pandemic, highlighting the critical need for novel antivirals. By designing and synthesizing a novel class of inhibitors, termed cyclic sulfonimidates, we will unlock new avenues for selective therapeutic interventions by exclusively targeting a-glucosidase-related processes. ER II a-glucosidase inhibitors, particularly 1,6-epi-cyclophellitol cyclic sulfate, represent a superior host-directed broad-spectrum approach to combat viral infections. Through the synthesis and evaluation of new, unprecedented, chiral, glucose-mimetic inhibitors, we will broaden the scope of Endoplasmic reticulum (ER)-resident a-glucosidase II as therapeutic targets. SMART is an interfaculty and multidisciplinary project that combines organic synthesis, biochemistry, and virology to explore a new chemical space, cyclic sulfonimidates, with diverse medical applications, including the treatment of viral infections.	Dr. Marta Elena Artola Pérez de Azanza, m.e.artola@lic.leidenuniv.nl
14	**Why do physicians prescribe proton pump inhibitors (PPIs)? A qualitative study on determinants of PPI prescriptions** *Given high rates of PPI use (2.3 million in the Netherlands in 2021) and concerns about side-effects and the fact that recent Dutch primary care studies show that >50% of chronic PPI users lack a valid indication, inappropriate PPI prescription needs to be addressed. In this proposed study we aim to identify the behavioral reasons why different physicians prescribe PPIs. We will conduct qualitative interviews with general practitioners in order to identify the underlying reasons (i.e., determinants) of their PPI prescribing behavior. Interviews will be scored according to the Theoretical Domains Framework (TDF) in order to acquire a comprehensive picture of the relevant determinants of PPI prescribing behavior. Insights from these interviews can be used for designing an intervention targeting key determinants using evidence-based Behavior Change Techniques (BCTs).*	Dr. Laurens van Gestel, l.c.van.gestel@fsw.leidenuniv.nl
15	**Academic Activism and the Climate Crisis** Recent scientific research paints an increasingly bleak picture of the state of our climate and ecosystems. Meanwhile, governments globally seem unable or unwilling to tackle climate change effectively. Faced with the prospect of social and ecological catastrophe, many academics today struggle with their role. Increasing numbers take to the streets and engage in activism not just as citizens, but as scientists and scholars. Should scientists be activists? On what grounds (if any) is it defensible for scientists and scholars to engage in political action in their role as academics? How (if at all) do they reconcile their academic integrity with political action? Does the notion of academic freedom enable or constrain academic activism? Addressing these pressing questions about the relation between science and politics requires interdisciplinary collaboration. It requires that we empirically map out arguments and opinions on academic climate activism; philosophically analyze their presuppositions and implications; compare current forms of academic activism with earlier examples of political action by scientists (e.g. in the movement against nuclear weapons); assess how academic activism impacts public perceptions and policy-making. Currently some work is being done on aspects of this problem, but the literature is highly partial and fragmented. We seek to bring together scholars addressing this problem from a	Thomas Fossen, t.fossen@phil.leidenuniv.nl

	variety of disciplines in order to build an international and interdisciplinary network and formulate a common research agenda.	
16	**Integrating for 'Development Aid'? 50 Years of 'Cooperation' Among African, Caribbean, and Pacific States** The year 2025 will mark the 50th Anniversary of the Georgetown Agreement, which formally established the African, Caribbean, and Pacific Group of States. This body evolved into the Organisation of African, Caribbean, and Pacific States (OACPS) in 2019. While cooperation among ACP states is almost five decades, the origins of this organization, its utility, and its relationship with the ACP-European Economic Community (EEC) Agreement (Lomé Convention) remain subjects of debate. When the agreement was established in 1975, its goal was to promote greater and closer trade, economic, social, and cultural relations among member countries. However, it explicitly stated that the Lomé Convention of 1975, signed months before the Georgetown Agreement, would be the primary catalyst for economic development and growth in the ACP Group of Countries. Implicit in the Lomé Convention was a focus on aiding Africa's economic development and growth. The planned fiftieth-anniversary conference aims to bring together diverse interest groups to reflect on the origins, activities, and operations of the ACP-EEC Convention over the past 50 years. The planned research will address the various contestations that have arisen since the ACP-EEC Convention was signed and contribute to the broader debate on the utility of intercontinental cooperation among developing countries in the global south.	Professor (dr) Chibuike Uche, c.u.uche@asc.leidenuniv.nl
17	**Seeking Synergy between Bioethics and AI-Ethics to address challenges in applied ethics** This project aims to explore both conceptually and empirically the extent to which AI-Ethics and Bioethics as two distinct subdisciplines of applied ethics can provide insights for each other. These insights may be useful in comprehending and addressing the contemporary challenges that emanate from the advancement of technology. This project consists of two pillars: conceptual pillar and empirical component. Conceptual pillar aims to make a comparative analysis of Bioethics and AI-Ethics disciplines to identify convergences and divergences. The goal of this pillar is to produce a theoretical journal article with some heuristic examples (which will involve game theoretic depictions and simple agent-based simulations). The fundamental goal is to discover the potential usefulness of these two applied ethics fields for each other. Empirical component aims to develop a simulation environment where typical ethical challenges of Bio and AI ethics fields will be created through agent-based modelling. Machine learning algorithms will be designed in accordance with AI-ethics, Bioethics and hybrid principles. The goal is to see the implications of pure and mixed forms of algorithmic solutions to typical ethical challenges emanating from AI- and Bio ethics fields.	Lu Cao, l.cao@liacs.leidenuniv.nl
18	**Medical encounters: the interdisciplinarity of Health Humanities** Medical Encounters beoogt Leidse onderzoekers uit de diverse faculteiten van de Universiteit Leiden bijeen te brengen op het uitgestrekte terrein van Health Humanities: de studie van de menselijke ervaring van gezondheid, (medische) zorg en well-being. Het doel is de beschikbare expertise binnen de gezondheidswetenschappen, sociale wetenschappen en geesteswetenschappen te kunnen inzetten voor de verdere ontwikkeling van Leids interdisciplinair onderzoek binnen Health Humanities. Hoewel de studie van de (medische) zorg in de sociale, (inter)culturele en communicatieve context binnen verschillende faculteiten en instituten een plaats heeft, ontbreekt nu nog een gemeenschappelijke basis. Door onderzoekers uit te nodigen zich aan te sluiten bij het platform van Medical Encounters, wil dit project zorgen voor uitwisseling van expertise, inzichten, methoden en benaderingen die de Health Humanities in Leiden een eigen interfacultair en interdisciplinair profiel gaan geven. Centraal staat het idee van interactie in medische context en het doel is om op dit onderwerp samen interdisciplinaire onderzoeksprojecten (zoals beursaanvragen of pilot-projecten) en onderwijsprojecten (zoals een honours course en mogelijk een minor) op te zetten. Om het beoogde platform Medical Encounters gestalte te geven, zal een universitaire website met infrastructuur voor communicatie, blogposts, aankondigingen en uitwisseling worden opgezet. In 2024-2025 worden er maandelijks bijeenkomsten georganiseerd om de onderzoeks- en onderwijssamenwerking vorm te geven en in mei 2025 zal een tweedaagse interdisciplinaire workshop met Leidse onderzoekers en enkele invited speakers over Medical Encounters worden georganiseerd.	Dr. G. Warnar, g.warnar@hum.leidenuniv.nl
19	**Building Bonds with Bricks** The objective of our project is to foster interdisciplinary collaboration between researchers from LIACS (FWN) and LUCAS (FGW) through the innovative method of Lego® Serious Play®. Our initial focus will be on conducting a pilot program aimed at stimulating cooperation through play between these two institutes, with a specific emphasis on the fields of Artificial Intelligence and Data Science. We aspire to use this pilot as a steppingstone to submit a joint grant application (with the specific call yet to be determined) involving both institutes. Once the pilot proves successful, our goal is to expand the application of Lego® Serious Play® within Leiden University, both within the SAILS network and the LRS programme. Furthermore, we intend to extend its use to collaborative projects beyond academia, engaging external partners such as the Leiden City Council, thereby expanding its societal impact.	Mischa Hautvast, m.hautvast@liacs.leidenuniv.nl

21	**Green Parenting; fostering sustainability at the level of families** De groeiende behoefte aan voedsel, water en energie zorgt ervoor dat de mensheid de planeet op ongekende schaal transformeert. De gevolgen zijn zichtbaar in klimaatverandering, landdegradatie, gebrek aan zoet water en afname van biodiversiteit. Dit heeft vooral grote gevolgen voor de generatie die nu opgroeit: de letterlijke kinderen van de rekening. Het zijn ook deze jonge mensen die een enorm potentieel bevatten om iets te doen aan de impact die we hebben als samenleving. Kinderen staan meer open voor het aanpassen van hun gedrag, zijn gevoelig voor de boodschap van bezorgde ecologen en activisten, en kunnen in gezinnen belangrijke transformaties in gang zetten. Verandering van gedrag vindt plaats in de context van scholen en gezinnen, waar het eigen maken van andere gewoontes grote gevolgen kan hebben. Toch wordt de rol van kinderen, en de gezins- en schoolcontext waarin ze zich bewegen, weinig meegenomen in het onderzoek naar duurzaamheid. Met dit project willen we de interdisciplinaire mogelijkheden verkennen om daar iets aan te doen. Door middel van een pilotstudie naar het effect van duurzaamheidsmotieven van kinderen binnen gezinnen willen we de impact van ecologisch bewustzijn in kinderen op gedrag in gezinnen onderzoeken. Daarnaast willen we een meerdaagse workshop opzetten (in samenwerking met het Lorentz Center) waarbij we een grote groep onderzoekers en experts uit diverse disciplines bij elkaar brengen om de mogelijkheden te verkennen hoe we de rol van kinderen, gezinnen en scholen een plek kunnen geven in de gezamenlijke ambitie naar een duurzamere samenleving.	Peter Bos , p.a.bos@fsw.leidenuniv.nl
22	**Unravelling the structure of a unique Clostridioides difficile phosphotransferase enzyme to enable antibiotic discovery** Bacterial flagella are used for bacterial locomotion. These ‘whipping tails’ are built up from flagellin C proteins that are functionalized with post-translation modifications (PTMs) for proper functioning. Clostridioides difficile is an important human gut pathogen, which is responsible for most antibiotic-associated infectious diarrhoea and colitis. The proteins that make up the C. difficile flagella, FliC, are modified with a unique PTM, in which an N-acetylglucosamine is appended to a FliC serine residue and decorated with an N-methyl phosphothreonine. We have very recently established that this PTM is introduced by the phosphotransferase CD0244 using N-methylthreonine-cytidinediphosphate (MeThr-CDP) as a donor building block. This project aims at setting up a pilot study to enable the crystallization of CD0244 and to elucidate the structure of CD244 in complex with (stabilized) donor and acceptor building blocks to unravel the mode of action of this unique phosphotransferase at the atomic level. This will be an important stepping stone for structure-guided inhibitor design and the conception of potential novel antibiotic agents, as the C. difficile PTM has been shown to be crucial for mobility of this gut bacterium.	Zachary Armstrong, z.w.b.armstrong@lic.leidenuniv.nl
23	**Communicating uncertainty – an interdisciplinary perspective** For science-informed decisions, decision-makers should incorporate scientific results in their choices, e.g. regarding important topics like climate, law, and health. However, science is intrinsically imperfect, and predictions are inherently uncertain. And, as decisions based on highly uncertain predictions are riskier than those based on certain predictions2, it is important to be transparent about the uncertainties. In this project we will bring together researchers working in at least three faculties from Leiden University to study the interdisciplinary problem of communicating uncertainty from their own different perspectives. With an opening symposium on the topic, we aim to attract one or two more researchers from another faculty to team up with us on the project. Then, with the help of student assistants from three faculties, we will do a pilot study on people’s understanding an interpretation of uncertainty in a context relevant to the third faculty (e.g. in Law). The results or our pilot study will be the starting point for developing new ideas for joint research proposals for larger studies.	Dr. S.J.W. Willems, s.j.w.willems@fsw.leidenuniv.nl
24	**The anti-inflammatory function of the lubricant proteoglycan 4: shifting the therapeutic focus from atherosclerotic cardiovascular disease to rheumatoid arthritis** Previous studies in proteoglycan 4 (PRG4) knockout mice have suggested that the endogenously produced lubricant PRG4 protects mice from the development of atherosclerosis. A recent follow-up study has validated that chronic treatment of mice with a recombinant human version of the protein (rhPRG4) is indeed associated with the anticipated reduction in the susceptibility to atherosclerotic cardiovascular disease. The atheroprotective effect of rhPRG4 can likely be attributed to a marked improvement in the inflammatory state of the mice, i.e. a reduction in systemic levels of the pro-inflammatory cytokine tumor necrosis factor-alpha. Importantly, tumor necrosis factor-alpha is a main driver of the disease pathology of the chronic inflammatory disorder rheumatoid arthritis that is characterized by a progressive destruction of bone and cartilage in the joints. In this proof-of-concept pilot study, we will make use of the combined expertise on PRG4 function from Dr. Menno Hoekstra and the world-leading activities in rheumatoid arthritis from Prof.dr. Rene Toes to potentially uncover an important role for this protein target in a novel disease area. Hereto, we will determine the effect of chronic treatment with rhPRG4 in the anti-collagen antibody cocktail-induced arthritis mouse model available	Menno Hoekstra, hoekstra@lacdr.leidenuniv.nl

	within the Division of Rheumatology of the LUMC. If through this proposed research a significant role for rhPRG4 in the protection against rheumatoid arthritis in the preclinical setting can be verified, we will expand our newly established collaboration to further investigate the relevance of PRG4 in the clinical rheumatoid arthritis setting (i.e. as a biomarker or therapeutic moiety).	
25	**Scrutinizing financial vulnerability in the criminal justice system. An interdisciplinary research line into the financial situation of individuals before and after criminal justice decisions** Een aanzienlijk deel van de personen die met het strafrecht in aanraking komen, heeft te maken met financiële problemen. Voordat zij met justitie in aanraking komen, maakt een deel van hen al gebruik van ondersteuning op het gebied van werk en inkomen en heeft een hoge mate van financiële stress ervaren. Psychologisch onderzoek onderschrijft hoe (langdurige) financiële stress grote cognitieve mentale en lichamelijke gevolgen kan hebben, waardoor sneller suboptimale beslissingen genomen worden. Na strafrechtelijke beslissingen kunnen de financiële problemen vervolgens verergeren, bijvoorbeeld door het opstapelen van schulden of verliezen van een baan na een gevangenisstraf. Zo is er kans op een vicieuze cirkel waarbij kwetsbare groepen vaker criminaliteit plegen en dus zwaardere straffen ontvangen, waardoor zij vervolgens grotere financiële problemen ervaren en meer recidive plegen. Om recidive te kunnen verminderen en het welzijn van deze personen en de samenleving als geheel te verbeteren, is interdisciplinair onderzoek nodig naar de financiële kwetsbaarheid van personen die met justitie in aanraking komen. Met deze aanvraag wordt beoogd de kennis en expertise binnen het Instituut voor Strafrecht en Criminologie en de sectie Sociale Economische en Organisatiepsychologie te bundelen om een nieuwe onderzoekslijn op te zetten waarbij financiële kwetsbaarheid en beslissingen in de strafrechtsketen centraal staan	Rosa Koenraadt, r.m.koenraadt@law.leidenuniv.nl
26	**Covalently activating autophagy to develop novel host-direct antibiotics** Antibiotic resistant bacterial infections, such as those cause by M. tuberculosis (Mtb), kill more than 1.3 million people annually and place a enormous economic on society. There are limited treatment options available, and existing drugs cause significant toxic side effects and are rapidly becoming ineffective due to drug resistance. Consequently, new strategies are urgently required to treat Mtb infections. Autophagy is an essential pathway cells use to degrade bacteria and mount an effective immune response. Mtb specfically disables autophagy in infected cells, in part, by inactivating transcription factor EB (TFEB). Excitingly, TFEB was recently identified to be activated by an endogenous electrophilic metabolite. This finding raises the possibility that covalent small molecule drugs could be developed to mimic this natural regulatory mechanism, and restore antibacterial immunity in Mtb-infected cells by enhancing autophagy. This Kiem-funded project aims to identify such compounds by using a combination of fluorecence assays, medicinal chemistry, and high resolution mass spectometry. The target and mechanism of hit compounds will be validated and used to provide proof-of-concept for TFEB as a viable drug target. This intedisciplinary research relies on the synergistic expertise of medicinal chemists at the LIC, and the Mycobacterial Research group at the LUMC. It will deliver insights into mechanisms of immune evasion by Mtb, and the role of electrophilic post-translational modifications in transcriptional regulation. The small molecules discovered will provide chemical tools for basic research, lead compounds for the development of host-direced antibiotics, and open opportunities to treat other diseases associated with dysfunctional autophagy.	Dr. Madeline Kavanagh, m.e.kavanagh@lic.leidenuniv.nl
27	**Growing up in the digital age: Topic and fallacy detection in social media content** Teenagers worldwide use social media as their primary source of information, despite the prevalence of misinformation. This has severe consequences, including increased belief in conspiracy theories and rising right-wing extremism among youth. Studies show that misinformation often employs reasoning fallacies to appear more persuasive. This project aims to develop and evaluate machine learning models to identify reasoning fallacies in social media videos from platforms popular among youth (e.g., TikTok). The resulting tool will facilitate detailed, automated studies of the content that youth are exposed to. Insights from this research can inform educational programs to combat misinformation tailored to youth. This KIEM-grant specifically will be used to employ research assistants for the annotation of reasoning fallacies in (already collected) TikTok video transcripts, which is an essential step for the development and evaluation of reliable machine learning models. The interdisciplinary team includes Dr. Westera (Centre for Linguistics), an expert in Natural Language Processing and social media data, and Dr. Ma (Developmental and Educational Psychology), an expert in how adolescents gather information to shape their beliefs. This collaboration integrates computational linguistics and developmental psychology to address the societal impact of social media on youth.	Dr. Ili Ma, i.ma@fsw.leidenuniv.nl

28	**Biodiversity in the City - The nature value of Singelpark XL** This Leiden Biodiversity Network (LBN) sponsored project brings scientists working on biodiversityrelated topics from three FWN institutes (IBL, CML & Hortus Botanicus) together with researchers in the Humanities (LUIH, LUCAS) and the Social Sciences (CS Lab, CWTS). Our aim is to investigate the 'nature value' of the proposed second green ring around the city of Leiden, dubbed 'Singelpark XL', together with local residents and other societal stakeholders. With funding to support the coordination and communication effort, we will (1) identify the various ecosystem typologies and historical nature and land-uses of the areas covered by the proposed Singelpark XL and it's spokes, (2) identify existing proven Citizen Science approaches to assessing the biodiversity of plant and animal life (including land, air and water) and other indepth biomonitoring approaches for aquatic, above- and below ground terrestrial ecosystems, and (3) design and execute a series of Citizen Science workshops and Bioblitz events to engage neighbouring residents, grassroots nature initiatives, and other societal stakeholders in participatory biodiversity monitoring activities. These investigations will be paired with an investigation of the mental health and living environment benefits of these green locations. The project will be placed in the context of the 450 Lustrum celebrations of the University of Leiden, providing a communication boost for outreach and engagement. The resulting data and insights will (4) be gathered and presented to provide scientific backing and evidence for the selection of the final Singelpark XL route and its spoke connections to the current internal Singelpark.	Margaret Gold, m.j.gold@cwts.leidenuniv.nl
29	**The inclusive teacher of tomorrow - Elaborative Needs Assessment of Teachers in Training for Enhancing Inclusive Educational Practices for Pupils with Special Needs** It is a basic human right for every school-aged child to receive appropriate education that suits their learning needs and supports them in developing to their full potential (UN, 2006, article 24). However, children with special educational needs (SEN) often experience educational inequity compared to children without SEN (e.g., Terzi, 2010). Many children with SEN are living in a world segregated from the majority of their typically developing peers (Inspectie van het Onderwijs, 2020); or when they are enrolled in mainstream education, schools lack the professional knowledge, experience, manpower, time, and financial resources to provide these children a safe, nurturing, and inclusive learning environment (e.g., Civitillo et al., 2020; Ledoux & Waslander, 2020). One commonly acknowledged challenge faced by mainstream schools when integrating pupils with SEN into their educational programs is the lack of knowledge and tools for an inclusive teaching practice. This interdisciplinary project aims to take a first step towards delivering inclusive education to pupils with SEN in mainstream schools. Specifically, we will conduct an elaborative needs assessment in which stakeholders' experiences and perceptions are placed at the center, to evaluate the needs perceived by student teachers, their learners, teacher educators, and school-based mentors in mainstream education. By focusing on the practical needs and challenges as experienced by various stakeholders, rather than starting from an 'ideal' situation based on academic knowledge or opinions on what teachers 'should' be doing, we aim to ensure that future interventions are practically relevant and executable within an already overstretched teacher education context.	Lotte van der Pol, l.d.van.der.pol@luc.leidenuniv.nl
30	**Innovative education: the power of diverse perspectives** Interprofessional education (IPE) has gained recognition as an effective approach to prepare healthcare professionals for collaborative practice. IPE focuses on promoting teamwork, communication, and shared decision-making. This project explores the concepts of perspective taking in IPE, aiming to understand their impact on the learning process and outcomes of MasterMinds Challenge students. This project starts in the medical domain, but the results are relevant to other domains involving interdisciplinary work. We teach a compulsory course for medical students: the MasterMinds Challenge. Students from other disciplines join regularly. Using design thinking techniques, student groups develop creative solutions solving authentic healthcare challenges prioritizing stakeholder empathy. Learning objectives relate to collaborative skills and perspective taking, and the context offers a unique opportunity to assess the cognitive aspects of interprofessional learning. This proposal aims to provide insights into the learning experience of participating students that are scarcely described in literature. We propose a mixed-methods approach to assess the working mechanisms behind the MasterMinds Challenge: we will perform pre-course survey and interviews, post-course survey and focus groups and participant observations. We use perspective taking scales and collaborative skills scales surveys to assess participants' self-perceived abilities. Interviews, focus groups and observations will provide a comprehensive understanding of participants' experiences and the relationship between perspective taking and teamwork outcomes. In-depth data analyses will infer the working mechanisms. Findings will contribute to the development of interprofessional educational approaches in medical education and inform the development of evidence-based practices enhancing collaborative skills in the multidisciplinary field of medicine and beyond.	Monique van Velzen, m.van_velzen@lumc.nl

31	**A Just Approach to Reparations for Historical Wrongs** Het voornaamste doel van dit project is te onderzoeken hoe de discussie rond herstelbetalingen voor het Nederlandse koloniale en slavernijverleden past in een internationale trend van modernisering en humanisering van de (internationaalrechtelijke) regels rond herstelbetalingen. Meer algemeen proberen we een benadering te vinden van de problematiek van herstelbetalingen voor historische misstanden die rechtvaardig is, recht doet aan de menselijke waardigheid, en oog heeft voor de politieke, historische, en juridische context.	Otto Spijkers, o.spijkers@luc.leidenuniv.nl
32	**Creating Visions of Future War** "Creating Visions of Future War" is an innovative project designed to engage students in speculative fiction writing about the future of warfare. This initiative, a collaboration between the Institute of Security and Global Affairs (ISGA) and The Institute for History, aims to enhance students' creative and critical thinking skills while providing fresh perspectives for military and government professionals. Through a structured program, students will participate in a workshop led by Dr Malte Riemann, Dr Lukas Milevski, and a professional fiction writer with experience in TV and Film production. These workshops will cover narrative development, real-life-world-building, and the unique challenges of writing about future conflicts. Following the workshop phase, students will develop their fictional accounts with continuous support from Dr Riemann, Dr Milevski, and the writer. The project will culminate in a final workshop where students present their projects to a panel of military and government professionals. This panel will evaluate the narratives based on strategic insight, selecting the best works for publication in The Netherlands Journal of War Studies (or similar outlet). Additionally, Dr Riemann and Dr Milevski will develop a teaching-and-learning-based article that will discuss the findings of this project and submit it to a peer-reviewed academic journal "Creating Visions of Future War" enhances student employability by developing a broad range of transferable skills and also provides valuable professional engagement and networking opportunities.	Malte Riemann, m.riemann@fgga.leidenuniv.nl
33	**Optical effects by ocular proton therapy** Bestraling met hoge energie protonen is een van de behandelingen van het oogmelanoom, de in Nederland meest voorkomende soort oogkanker. Tijdens deze behandeling neemt een deel van de patiënten blauw licht waar in gestructureerde patronen. Hoewel deze vorm van bestraling al sinds de jaren 70 beschikbaar is, is er verassend genoeg geen verklaring voor dit fenomeen. In dit voorstel slaan onderzoekers vanuit de Natuurkunde, Radiotherapie en Oogheelkunde de handen ineen, om een antwoord te vinden op de vraag: Wat veroorzaakt het blauwe licht en de periodieke patronen die patiënten waarnemen tijdens de protonen therapie van het oog?	Pauline Bakker, p.a.c.bakker@lumc.nl
34	**Signs on Paper: Unlocking the history and diversity of sign languages with AI** Large language models (LLMs) like ChatGPT and multimodal machine learning (MML) foundation models have taken the world by storm, by integrating text and audio-visual data. However, these models exhibit an ableist bias, and a bias towards Western and spoken languages. This sidelines deaf communities globally and research on their languages and cultures by not covering the full range of linguistic diversity. Moreover, the existing digital tools for recognition and comparison of sign languages are exclusively made for video data, excluding historical data in the form of print dictionaries. We propose to address this gap by building the first-ever digital corpus of print dictionaries of historical and contemporary sign languages, including a representative number of African ones and applying MML on them. We will create an initial image dataset from a variety of print sign language dictionaries and explore the use of multimodal foundation models for semi-automated segmentation, information extraction and annotation of these materials. This initiative not only represents a unique addition to the SL research field, but also significantly contributes to the use of AI for societal and scientific good. It. Moreover, it introduces scientific innovation in the AI domain by tackling ethical bias issues, and enhancing MML/foundation model methodologies.	Victoria Nyst, v.a.s.nyst@hum.leidenuniv.nl

35	**Stepping outside of academia: scientific integrity in the Dutch Legal system and news media** Dutch Academia has a well-established system that comes into play when suspicions of scientific integrity issues arise. This so-called CWI-system is governed by a single national code ('Netherlands Code of Conduct for Scientific Integrity", or the Code), supported by all 22 Universities and medical centers in the Netherlands and includes confidants for support, investigative committees, and a national appeals body. The nature of this Dutch system is mainly based on peer evaluation of actions against general principles and specific norms. This puts the handling of allegations of scientific misconduct firmly in the academic ecosystem. However, as science is a societal activity funded with public funds, other systems focused on checks and balances could also be in play. This project will describe and analyze at how potential breaches of scientific integrity are discussed and dealt with in other relevant systems. We do so specifically by performing a systematic review of the Dutch legal jurisprudence for a a picture of the legal weighting of the alleged breaches of scientific integrity and Dutch national news media to get a journalistic overview how these violations are viewed. Do the two correspond? And how do these systems and their views overlap with the CWI-system and the Netherlands Code for scientific integrity? The results of this project be useful in the current revision process of the Code and potentially the related CWI system, as well in scientific integrity training and investigations at our university.	Bob Siegerink, b.siegerink@lumc.nl
36	**Modeling the impact of Geopolitical Conflicts and Sanctions on International Academic Collaboration** This project aims to examine the potential impact of economic sanctions on scientific collaboration and the flow of knowledge within the scientific community. Specifically, it focuses on recent case studies involving the economic and scientific sanctions imposed by various countries on Russia following the Russia-Ukraine conflict in 2022. It has been observed that these sanctions have led to a significant decrease in scientific collaboration between Russia and Western countries. Several recent articles have analyzed scientific collaboration data, revealing that Russia has increased its collaboration with other countries, including China and India. Our study will conduct statistical comparisons of the co-authorship networks of these countries before and after the imposition of these sanctions. We will investigate how these policies have influenced the structure and dynamics of the co-authorship network over time. The proposed project consists of two main components. First, we will develop a theoretical model to capture the evolution of the scientific collaboration network as a result of the imposed sanctions. This model will also aid in predicting changes in scientific collaborations if similar sanctions are imposed in the future. Second, we aim to train a machine learning model to predict newly formed and dissolved links in scientific collaborations due to these sanctions. Our analyses will provide valuable insights into the effects of such policies and serve as a basis for predicting the impact of similar policies in the future. Additionally, this project will help evaluate the gains and losses in scientific productivity of different entities resulting from such events.	Dr. Akrati Saxena, a.saxena@liacs.leidenuniv.nl
37	**Digital Technologies for the Public Interest** Digital technologies and platforms are increasingly shaping social interactions. During the last decade, digital platforms have become ever more powerful. On the one hand, they have enabled the formation of critical counterpublics. On the other, they have facilitated the spread of misinformation and increased polarization. Progress in (generative) AI has multiplied the possibilities for content generation, further increasing these risks. As a response, new normative frameworks for media and technology, such as the AI Act or the European Media Freedom Act, have called for public organizations to draft standards for the responsible use of AI. This project explores how digital technologies shape societal dynamics, especially in public debates and contentious politics, e.g., climate change, vaccinations, and migration. We are also interested in how specific policies around digital technologies and platforms affect these discussions and, in turn, shape social outcomes. We look at how the design of technologies, platforms, and algorithms might have unexpected consequences for civil discourse. This raises complex questions about who is responsible for moderating online interactions and developments in decentralized, federated technologies. An innovative aspect of this project is that it approaches the question of how digital technologies shape societal dynamics from a Public Interest Technologies (PIT) perspective. PIT is a new and multidisciplinary field that seeks to bring together professionals who have fluency across cross-curricular domains of knowledge and practice to advance the use of technology in governance structures. This involves creating a network of practitioners, researchers, policymakers, and civil society actors.	Tomás Dodds, t.dodds.rojas@hum.leidenuniv.nl

38	**Regenerating 'Spiral of Time': Multi-sensory displays and audience experiences** This research project aims to develop two experimental displays for the artwork "Spiral of Time'' by Edwin van der Heide. This work presents itself through a captivating spiral representing time. It is based on a continuously growing library of sound, recorded at one or more site-specific locations. Exploring time through sound allows the audience to discover the different cyclical time patterns that articulate our world. By integrating insights from media studies, art history, curatorial studies, sound studies and human computer interaction this study will explore how different display strategies affect the audience's experiences of the work. The study employs the concept of "regenerative curation," which posits that artworks are part of larger ecosystems (social, technical, natural). Consequently, when exhibiting and preserving these artworks, the material aspects or multi-sensory experiences are not necessarily fixed. Instead, the artwork can be considered "alive," capable of growing, transforming, and decaying. Over time, it can evolve or transform into different versions and iterations. A visitor research drawing on methods of sensory ethnography will investigate how the different display options impact visitors' experiences of the work. At the intersection of sound art production, sound studies research, and curatorial practice, this initiative is contributing to the newly emerging Sound Studies Center at Leiden University.	Edwin van der Heide, e.f.van.der.heide@liacs.leidenuniv.nl
39	**Nature Narratives: Bridging Humans and the Environment through Place-Based Education** This application requests support for a workshop of place-based educators (PBE), planned for June 2025 in Dakar, Senegal where IIAS will be conducting its Africa-Asia Conference. The meeting will be an opportunity to mobilize case-studies focused on PBE, drawing from the ongoing collaboration of Leiden University College (LUC) with IIAS through its Humanities Across Borders (HAB) Consortium. We would welcome a new LUC colleague who is working in West Africa (Ghana). This new engagement will focus on gathering stories from ecology of places (rivers, mountains, forests) in and around Dakar. This would expand our current focus on storytelling in PBE and locate it within a more human-ecological-centric framework. During the workshop, we will develop several standalone case modules for use by educators in Asia and Africa, as well as at Leiden University. We plan to write a research paper and produce an edited volume under HAB's Methodologies Book Series (AUP) based on this experience. There is limited guidance on developing place-based education materials for teachers and learners whose spaces of education have been disrupted by conflict, climate change or other forms of vulnerabilities. Equally, there is a need for scholars from different disciplinary backgrounds to approach global and local challenges using collaborative methods to knowledge production and curricula development. Our experience with underground educators from Myanmar (https://humanitiesacrossborders.org/blog/sharing-stories-matter-reflecting-myanmar-underground-educators) has strengthened our belief that community engaged workshops deploying linguistically embedded, place-based, storytelling, remembering, mapping practices has the potential for building and supporting a next generation of narrative researchers and pedagogies in PBE.	Jyothi Thrivikraman, j.k.thrivikraman@luc.leidenuniv.nl
40	**Mobile Neighborhood & Citizen Lab** De Universiteit Leiden is met uiteenlopende initiatieven aanwezig in de stad en wijken van Den Haag met onderzoek (door studenten) en uiteenlopende opdrachten en samenwerkingsverbanden. Eén van deze initiatieven is het Buurtlab 070, een op duurzaamheid gericht programma dat studenten verbindt met Haagse wijkbewoners doormiddel van gezamenlijk onderzoek. Wat is het Mobiele Buurt en Citizen Lab en wat willen we ermee bereiken? Om het onderzoek in de Haagse wijken nog concreter en toegankelijker te maken willen we een mobiel lab opzetten waarmee studenten de bewoners kunnen opzoeken. Het Lab zal bestaan uit een 2dehands bakfiets die is aangekleed en uitgerust met lab- en onderzoekapparatuur om kleinschalige proeven in de wijken mogelijk te maken. We hebben het hier over instrumenten voor het meten van o.a. Geluid (overlast), Luchtkwaliteit, Hitte (stress), Neerslag, Zuurgraad (grond). Voor de samenstelling en aanschaf van de lab apparatuur zullen we vooral leunen op de kennis van CML (i.e. Roy Remme). Studenten van de universiteit Leiden kunnen deze bakfiets (geparkeerd in de fietsenstalling van Wijnhaven) lenen voor hun wijkonderzoek. Ook de collega's van Citizen Lab staat het vrij deze te gebruiken. Studies en samenwerkingen die we het gebruik van het mobile lab (i.e. bakfiets) zullen aanbieden: Governance of Sustainability (MSc UL) Biology (BSc/MSc UL) Industrial Ecology (MSc UL) Leiden Biodiversity Network Sustainability, Climate Change and Food (Minor) Sustainable Development (Minor) Het mobiele lab kan op veel verschillende plekken worden ingezet. Denk bijvoorbeeld aan (basis)scholen, buurtcentra, volkstuinen, parken of voedselbossen. De inzet kan verschillen per project.	Bas Nijboer, s.g.w.nijboer@fgga.leidenuniv.nl

41	**The multiple voices of Leiden: Multilingualism and linguistic diversity in the city** This project aims to collect filmed linguistic testimonies of inhabitants of Leiden with a migratory background. These testimonies focus on how these people experience the extent to which their language and cultural background is welcomed in Dutch society and how this affects their identity, sense of belonging, and general wellbeing. These testimonies will be shown in a mini-exhibition, where they are embedded in a context of information about Leiden as a multilingual city. The scientific goal of the project is to acquire more insight in the processes that affect language vitality and links between language, identity, and wellbeing. The societal goal is to create more tolerance for the situation and struggles of migrants, and more appreciation for the intrinsic value of cultural and linguistic diversity.	Rik van Gijn, e.van.gijn@hum.leidenuniv.n
42	**L'CeSAR: the Leiden Center for the Study of Ancient Religions** Leiden University is the home to many specialists in the study of ancient religions. Up to now, our disciplinary boundaries have kept us from fully developing cooperation across Faculties – especially those of Humanities and Archaeology and their associated Institutes. This network aims to bridge those divisions and allow the experts to fruitfully pool their resources. With the KIEM grant the network will organize workshops with intelectual, educational, as well as networking purposes. In the long term the network is meant to become a nexus for interdisciplinary collaboration, providing a platform for scholarly dialogue and knowledge dissemination, organizing teaching courses at institutes, as well as for attracting and supporting (third-party funding applications by) external scholars. We have chosen to focus on materiality as our 2025 theme and method. Materiality combines the research specialisations of archaeologists and historians and is an important new element in many research fields. We believe that if scholars combine their expertise around this theme we will be able to forge a new understanding of ancient religious life and its lived experience. The longer term goal, which takes both the network and the result of the grant beyond 2025 is, apart from continuing and building upon the 2025 network, to invite selected speakers from the worksbop to submit a paper to a collaborative edited volume to be offered for publication to the series Religions in the Graeco-Roman World (Brill, Leiden), This book will not only show L'CaSAR to the world but also provide proof of concept for our ideas.	Dr Kim Beerden, k.beerden@hum.leidenuniv.nl
43	**PROMISE – Personalized migraine prediction using smartphone information for episodic attacks** Migraine is een invaliderende en veelvoorkomende hersenaandoening.1 De onvoorspelbaarheid van migraineaanvallen heeft grote impact op het leven van patiënten en leidt tot angst, depressie en gevoelens van controleverlies. Elektronische hoofdpijndagboeken ('E-diaries')2 kunnen inzicht geven in aanvalspatronen en uitlokkende factoren, zoals slaaptekort, menstruatie, stress en dieet. Zelfgerapporteerde registraties geven echter geen continue informatie en kunnen minimale veranderingen voorafgaand aan aanvallen niet gemakkelijk detecteren. Het bijhouden van dagelijks smartphone-touchscreengedrag ('tappigrafie') levert metingen op die kunnen worden gebruikt voor het vroegtijdig opsporen van aanvallen.3 Idealiter zouden deze smartphone data en het e-diary worden gebruikt voor gepersonaliseerde voorspellingen, om vervolgens middels vroegtijdige waarschuwingssignalen patiënten meer controle te geven wanneer interventies nodig zijn. Voor dit onderzoek is het essentieel een interdisciplinair samenwerkingsverband op te zetten tussen clinici en machine learning experts. Het Leids Hoofdpijn Centrum (LUMC) verzamelt momenteel longitudinale E-diary data, waaronder triggerfactoren, weergegevens (doel n=500 migrainepatiënten) en tappigrafie (TapCounter) metingen (doel n≥100). In dit interdisciplinaire project willen we persoonlijke triggers bestuderen en voorspelmodellen ontwikkelen met behulp van machine learning, waarin het LIACS (Universiteit Leiden) uitgebreide expertise heeft. De belangrijkste innovatie is het onderzoeken en benutten van het temporele aspect van triggers en migraineaanvallen, wat slechts gedeeltelijk is gedaan in eerder onderzoek (voornamelijk door feature engineering en selectie4). Hiertoe zullen we recurrent neural networks (RNN's) leren om migraine te voorspellen uit de multivariate, gemengde continu-discrete tijdreeksen van het begin van migraine en potentiële triggers.5,6 Om dit mogelijk te maken is een eerste belangrijke stap een goede (software)infrastructuur voor data en machine learning methoden te ontwikkelen.	Prof. dr. G.M. Terwindt, g.m.terwindt@lumc.nl
44	**Teaching Complex Problems in a Polarized World: Environmental Science** In an increasingly fraught polarized policy discourse, with collapsing public perception of the legitimacy and authority of scientific and quantitative evidence, wise interpretation and communication of scientific results has reached heightened importance. In a policy domain such as the natural environment, it is of existential importance that our scholarly practice and teaching reflects these challenges. We propose two workshops that seek to develop interdisciplinary approaches on how to improve teaching practices that prepare students to critically engage with statistical and scientific information on these types of complex environmental problems. The first workshop will be dedicated to discussing specific issues in communicating scientific knowledge to the public on complex environmental problems. The second workshop will focus on the specific	Lucie Zicha, l.zicha@luc.leidenuniv.nl

	challenges in the university teaching practices improving statistical and scientific literacy linked to complex problems. We are very well positioned to do this. CML is a leading environmental institute that has a specialized knowledge on the complexities of environmental problems, the challenges with understanding environmental data and the intricacies of conducting sound science amidst highly polarized political climate. Leiden University College has developed innovative teaching practices applying core liberal arts principles in statistics and scientific education, emphasizing logical reasoning about quantitative data as a fundamental skill for understanding complex global problems.	
45	**Making up Migrants / Disabled: The pasts, presents, and futures of human classifying** Recently, scholars across the interdisciplinary fields of critical migration studies and disability studies have recognized in each other a shared commitment to denaturalize human-made classifications of people12. Following their example, scholars at Leiden University are right now exploring the synergies between the processes that historically made and continue to remake migrants/disabled people. However, until now, we are mostly doing so within our respective disciplines – history, law, anthropology – even if we recognize that the tasks at hand require multimethod and interdisciplinary approaches. With this project, we seek to come together, to explore common grounds, and grow new projects, connect to scholars at other (Dutch) universities, and, importantly, to practitioners and migrant and disability rights advocates, because 'nothing about us without us'. Concretely, we will organize three events: a focus session with committed colleagues, practitioners and organizers in October 2024; an inspiration day, with Rebecca Yeo, author of Disabling Migration Control in November/December 2024; and an international workshop in the spring of 2025, during which we will share preliminary insights, as well as research agenda. On the back of these events, we will publish an annotated bibliography, as well as a research agenda, showcasing Leiden University as a prominent hub for the study of these synergies.	Wiebe Ruijtenberg , w.d.ruijtenberg@law.leidenuniv.nl
46	**Leiden Urban Studies Interdisciplinary Research Group** Leiden's Urban Studies BA is a unique interdisciplinary and interfaculty degree program in operation since 2018. We draw teaching staff from 5 different faculties (Humanities, Social Science, Science, Law, Governance). Although our teaching program is extremely interdisciplinary, there currently exists no framework for associated research collaboration. This is a huge opportunity waiting to be seized, with a ready-made pool of c.40 urban researchers who are already collaborating on teaching but do not currently have any forum to engage with each other's research and develop shared research agendas and interdisciplinary projects. Kiem funding will be used to establish a Leiden Urban Studies Interdisciplinary Research Group (LUSIRG) in 2024-25. LUSIRG will provide precisely that missing forum for research exchanges amongst Urban Studies staff, where we will have the space to define and develop shared research agendas, and to germinate new collaborative and cross-disciplinary research projects. This will result in new urban research specialisms, projects, and outputs for Leiden University, as well as strengthening our BA program as new interdisciplinary approaches are fed back into our research-led teaching. Kiem funds will be used to hold two, one-day inaugural events for LUSIRG (in December 2024 and May 2025), with administrative support from student assistant (4 months@0.2fte). The first event will be a 'get to know your colleagues research' day, with many short research presentations. The second event will allow for more intensive research interactions, organised thematically around our emergent shared research agendas. Both events will include stimulating guest speakers and useful expert discussants.	Dr Alistair Kefford, a.kefford@hum.leidenuniv.nl
47	**Elucidating inter-macrophage interactions to reveal the secret behind tuberculosis** Tuberculosis is responsible for nearly 1.5 million deaths annually, prompting efforts to develop new host-directed therapies for TB. However, these efforts are hindered as granuloma formation complicates treatments. Granuloma is generated when macrophages adhere together through unknown mechanism to form a tumor-like structure. Granulomas help contain infection by isolating infected cells from healthy lung tissue, but they also hinder bacterial clearance. Infected macrophages within granulomas can spread the infection to new sites. Even with effective antibiotics, granulomas can expand and spread due to drug-tolerant bacteria in macrophages. Hence, understanding the direct interaction between macrophages is the crucial step for unravelling the fundamentals of granuloma formation and the spread of the disease. This project aims to directly measure these interactions using advanced single cell technologies.	Tom Evers , t.m.j.evers@lacdr.leidenuniv.n
48	**Bringing femicide into focus** This proposal develops a collaboration between researchers from three faculties (FGGA, LAW, ARCH) to study femicide – the killing of women and girls (in part) because of their gender. The concept of femicide has been very influential in the policy field and attention to the topic continues to grow (see this recent parliamentary report). However, its scientific basis represents	Dr. Jolien van Breen, j.a.van.breen@fgga.leidenuniv.nl

	a challenge – there are definitional issues, as well as empirical obstacles. For instance, the concept of gender is central to definition of femicide, but its involvement has been very difficult to study empirically. How can we establish whether a person was killed “because of” their gender? This project lays the foundations for an interdisciplinary initiative to strengthen the scientific basis underlying femicide research. The project also has an applied component: this work will form the basis of the Dutch Femicide Monitor. Several countries have recently set up Femicide monitors where femicide cases are registered. In the Netherlands, however, such a monitor is not yet available. The Monitor will provide reliable statistics and information about the scope and features of femicide in the Netherlands to journalists and policy makers, thereby facilitating nuance in the public debate and more impactful policy on the topic of femicide. The KIEM grant will be used to (1) conduct a pilot study for this project, and (2) foster further collaboration between the researchers involved, including orientation for more substantial grants to fund the underlying project.	
49	**Multispecies Collaboration and/or Bio-capitalization? Cyanobacterial-driven symbiosis for sustainable agriculture or microbial exploitation** Cyanobacteria, the oldest oxygenic photosynthesisers, have adapted to many, often extreme environments, and formed reversible (cycads) and irreversible (chloroplasts) symbioses with plants. We seek to harness these symbiotic relationships for the purpose of regenerative and sustainable agriculture. We aim to expand our investigation into the metabolic and microbial ecology mechanisms that sustain cognate symbiosis between cyanobacteria into peat moss used for sustainable agriculture in the Netherlands. We use this knowledge in the regeneration of a degraded, agricultural peatland nearby Leiden, the polderlab, which has been subject to both biological and sociological scrutiny in recent years. Simultaneously, we ask how collaborations between microbes, plants and Leiden university might be organized to contribute to a more just and transformative agricultural transition. We explore the various forms such collaborations might take and how these reconfigure the cyanobacteria as assets in the bioeconomy, solutions in agricultural policy, or as collaborators within the Leiden Biodiversity Network.	Paco Barona Gomez, f.barona.gomez@biology.leidenuniv.nl
50	**Are Humans Killing Their Home? An Analysis and Evaluation of the Crime of Ecocide** Anthropogenic climate change significantly and negatively impacts human and non-human natural systems. But are such impacts morally wrong and, if so, should they be criminalized? Some legal scholars and practitioners have argued for decades that the destruction of the environment constitutes a distinctive type of crime. This movement received a new impulse when the International Expert Panel, gathered by the Stop Ecocide Foundation, proposed a new definition of the crime of ecocide in June 2021 to be included in the Rome Statute of the International Criminal Court as the 5th international crime in times of peace (IEP, 2021). Although the proposal has gained significant traction in public discourse, the scholarly debate has so far been focused on specific legal issues such as those concerning the definition of mens rea requirement as well as the inclusion of the proportionality test. However, the concept of ecocide involves a much larger set of intricate conceptual and normative questions that are currently overlooked. This project aims to address at least some of those questions and offer provisional answers from a more interdisciplinary perspective. First, the project clarifies the normative foundations for any plausible definition of ecocide by addressing underlying moral, legal and political considerations. Second, it makes a practical contribution by engaging in the public debate concerning the adoption of the IEP’s definition of ecocide to expand the discussion by considering the specific harm(s) and wrong(s) involved in the crime of ecocide.	Jelena Belic, j.belic@fsw.leidenuniv.nl
51	**Networking Heritage at Leiden University** At Leiden University, 'heritage' is a prominent theme studied from various (inter)disciplinary perspectives, primarily within the faculties of Humanities, Archaeology, Law, and Social Sciences. However, the extensive research in this field and its potential connections are not widely recognized, both within Leiden and beyond. Enhancing the visibility and accessibility of this research is essential to foster new interdisciplinary collaborations within the university, and establish Leiden as a leading center for heritage studies in Europe. To begin, we will consider the mapping and visualizing practices employed by our sister Universities in Europe, to identify mapping and visualization practices that meet the Leiden requirements. Next, we will organize bottom-up workshops at each of the faculties at which heritage figures as a core research theme (Humanities, Archeology, Law and the Social Sciences) to explore what our Leiden colleagues are working on content wise, and what are according to them needs and lacunas when it comes to interdisciplinary heritage-oriented research at Leiden. The workshops are also intended to start building synergy among researchers of the various faculties involved, creating new openings for (future) interdisciplinary research projects. In addition, it can result in the identification of possibilities for joint interfaculty teaching programmes. We will also publish an open call asking Leiden University scholars to self-identify research that according to them fits the theme of heritage. Concluding the project, we hope to propose a prototype for the creation of a web-based tool, allowing for the mapping and visualization of heritage oriented research at Leiden.	Dr. Erik de Maaker, maaker@fsw.leidenuniv.nl
52	**From maps to apps in Java: Grasping space through objects** Areal and spatial imaginaries are articulated through a variety of media ranging from maps to apps. Considering cultural artefacts and productions under the aspect of areal and spatial imagination—which is more commonly and readily done in some cases than in others—	Verena Meyer, v.h.meyer@hum.leidenuniv.nl

	provides an opportunity to re-centre familiar understandings of area and areamaking, space and spatialization that have crystallized in academic scholarship, all the more so if the modes of research and presentation reach beyond the traditional paper and print. This project takes up the challenge. Through a collaboration among scholars of Indonesia working in both the Humanities and Social Sciences, we undertake a series of case studies that we discuss at a workshop with a group of international participants to together build a new paradigm for understanding spatial imaginaries in Indonesia and beyond. Our collaboration will yield a small set of born-digital multimedia works of scholarship (publications). The digital, interactive, multimedia nature of these research publications will allow us to consider the combination of and interaction between visuality, temporality, sonicality, textuality, and narrativity. The project thus employs a digital synthesis of fundamental research methods in the humanities and humanistic social sciences. This comprises formal analysis, textual analysis, historicization, and ethnographic fieldwork. Through these methods, we will cast light on what could be called the life of the objects and productions concerned.	
53	**Behavioral insights for governance and public policy: Toward inter- and transdisciplinarity in research and (executive) education** De structuren, processen en systemen van de overheid sluiten dikwijls niet aan bij de verwachtingen, capaciteiten en het gedrag van mensen. Er zijn tal van wetenschappelijke en maatschappelijke kennisbehoeften op het snijvlak van psychologie en bestuurskunde die vragen om gedragszinzichten voor bestuur en beleid. Het doel van de aanvraag is het versterken van onze interdisciplinaire en transdisciplinaire capaciteit om gedragsinzichten te generen voor een overheid die beter werkt voor mensen. Het versterken van interdisciplinariteit op deze thematiek in onderzoek en (executive) onderwijs kan bijdragen aan het genereren, delen en toepassen van de gedragsinzichten die nodig zijn om het functioneren van de overheid en haar interactie met burgers te verbeteren. De aanvraag richt zich in het bijzonder op het versterken van interdisciplinaire samenwerking tussen wetenschappelijk personeel van Psychologie en Bestuurskunde. De aanvraag beoogd daarnaast om transdisciplinariteit op het gebied van psychologie en bestuurskunde te versterken. Verdere verbinding tussen wetenschappers van beide vakgebieden en praktijkprofessionals helpt om gedeelde kennisvragen te formuleren, praktijkkennis te benutten in onderzoek en het beter ontsluiten van gedragsinzichten middels (executive) onderwijs. De Kiem-beurs aanvraag wordt benut om een serie matchingbijeenkomsten te organiseren. Deze matchingsbijeenkomsten hebben een cumulatief karakter om gezamenlijke kennisvragen te identificeren en te ontwikkelen naar inter- en transdisciplinaire samenwerking op het gebied van onderzoek en (executive) onderwijs. Om zichtbaarheid en participatie van studenten te vergroten wordt de Kiem aanvraag benut om een scriptieprijs “Gedragsinzichten voor Bestuur en Beleid” in te stellen.	Joris van der Voet, j.van.der.voet@fgga.leidenuniv.nl
54	**A digital solution for assessing cognition in people with Parkinson’s disease: A pilot study.** De ziekte van Parkinson is een neurodegeneratieve aandoening waarbij mensen naast de welbekende motorische symptomen vaak ook cognitieve stoornissen ervaren (problemen met het denkvermogen). Het al dan niet ontstaan van cognitieve stoornissen en het verloop daarvan is per individu met de ziekte van Parkinson sterk verschillend. Om deze reden is het vroegtijdig detecteren en monitoren van cognitieve achteruitgang zeer belangrijk. Momenteel wordt het cognitief functioneren van mensen met de ziekte van Parkinson in kaart gebracht tijdens een klinisch consult, onder supervisie van een (neuro)psychologisch medewerker. Ondanks dat deze beoordelingen uitgebreid en betrouwbaar zijn, hebben deze beoordelingen ook verschillende nadelen, waaronder gevoeligheid voor stress en prestatiebias, hogere belasting en kosten voor patiënten en de zorg, en het niet tijdig kunnen opmerken van veranderingen in cognitie door de lage frequentie van ziekenhuisbezoeken. Dit roept de vraag op of ziekenhuisbeoordelingen van het cognitief functioneren van Parkinsonpatiënten gedeeltelijk kunnen worden vervangen door digitale (thuis)beoordelingen. In deze interdisciplinaire haalbaarheidsstudie combineren we medische en neuropsychologische expertise, om te onderzoeken 1) in hoe verre mensen met de ziekte van Parkinson in staat zijn digitale testen zelfstandig in een thuissituatie uit te voeren, en 2) wat de validiteit en betrouwbaarheid van de testen is om de relevantie en toepasbaarheid van deze testen te onderbouwen.	Dr. Marit Ruitenberg, m.f.l.ruitenberg@fsw.leidenuniv.nl
55	**And the bunny with the laser eyes came and fighted them!** **Investigating audience design in the ChiSCor children’s storytelling corpus** The current project aims to shed light on children’s ability to keep their audience in mind while spontaneously telling a story. Children’s ability to theorise about other people’s mental states (‘Theory of Mind’) has been investigated intensively (e.g., Wellman et al., 2001). Yet, how this kind of understanding is put into practice in daily life has received less attention. This project considers an investigation of children’s storytelling to be an excellent way to gain understanding of children’s Theory of Mind abilities ‘in action’, as it requires the storyteller to take into account a host of background variables pertaining to the audience members’ minds (regarding their world-knowledge, linguistic abilities, the shared knowledge with the story-teller, etc.). We leverage the newly published open-source corpus ChiSCor (Van Dijk, Spruit, & Van Duijn, 2023), which contains 700+ stories told semi-spontaneously by children aged 4-12 in classroom settings to investigate this issue. The project aims to develop a framework for annotating audience design during storytelling. This framework will consist of manual annotations, but also computationally extracted variables	Hannah De Mulder, h.n.m.de.mulder@hum.leidenuniv.nl

	to map the linguistic and narratological qualities that correlate with different levels of audience design. In addition, we will investigate how children's appreciation of stories is affected by the level of audience design that a story(teller) achieves. Finally, we will assess whether children with higher scores on standard Theory of Mind tests (data also available in ChiSCor) tell stories that are rated higher than those of children who display a less advanced understanding of others' knowledge states.	
56	**Ethnic Profiling Untaught: A tool & language to promote insight and reflexive action** Dit project richt zich op het ontwikkelen van een innovatieve tool en aangepaste taal om etnisch profileren te verminderen. Etnisch profileren, het disproportioneel vaak worden gecontroleerd door instellingen zoals de politie en de Koninklijke Marechaussee op basis van etniciteit, ondermijnt het vertrouwen van burgers in de overheid en tast haar legitimiteit aan. Ondanks juridische en maatschappelijke kritiek is het in Nederland moeilijk om open en constructieve dialogen over dit onderwerp te voeren. Dit project, geïnspireerd door het "Racism Untaught" framework van Mercer en Terresa Moses (2023), beoogt een aanpak op maat voor Nederlandse politieorganisaties te ontwikkelen. Het framework biedt methoden om racistische patronen te herkennen en aan te pakken, essentieel in de strijd tegen etnisch profileren. De culturele en historische context van Nederland en de specifieke focus van dit project op politieorganisaties vereist echter een vertaalslag. De interdisciplinaire aard van het project wordt benadrukt door het gebruik van Design Thinking, een benadering die expertise uit diverse velden zoals rechtsgeleerdheid, antropologie, politiewetenschappen, sociologie en communicatiewetenschappen verenigt en betrokkenen uit relevante domeinen, waaronder de Nationale Politie en de Koninklijke Marechaussee, samenbrengt. Het project beoogt niet alleen bewustzijn te creëren en praktische, werkbare handelingsperspectieven te bieden die breed gedragen en effectief zijn, maar ook de taal en manier waarop we over etnisch profileren praten zodanig te veranderen dat het bespreekbaar wordt en constructieve dialogen kunnen ontstaan.	Prof. dr. mr. Maartje van der Woude, m.a.h.vanderwoude@law.leidenuniv.nl
57	**Unveiling the Role of Mycobacterium tuberculosis Lipases in Lipid Metabolism and Bacterial Viability** Tuberculosis remains the deadliest infectious disease, necessitating novel therapeutic strategies. Using structure prediction programs we have identified a family of putative surface-anchored lipases in Mycobacterium tuberculosis (Mtb). We hypothesize that these enzymes may play roles in bacterial cell envelope homeostasis or the degradation of host lipids, which are vital for Mtb host survival. Here we aim to characterize the molecular function of these putative lipases and evaluate their potential as antibacterial targets. We will develop assays to characterize their lipid substrate specificities and investigate the effects of lipase inhibition on Mtb viability using planktonic growth and macrophage infection models. The findings are expected to provide first insights into the biological functions of these enzymes and their viability as drug targets, forming a foundation for future inhibitor screenings and comprehensive therapeutic development efforts.	Sebastian Geibel, s.r.j.geibel@lic.leidenuniv.nl
58	**Global Conversations: People, Heritage, and Challenges** Critical perspectives centered on decoloniality, postcolonialism, Indigenous archaeologies, and more-than-human approaches have gained considerable attention in archaeological research, and for many decades scholars have been grappling with critical questions about not only how to uncover traces of the past but also how to deal with them in contemporary society. But there are still more critical questions that need to be addressed. To answer some of them, this 6-week seminar will stimulate conversations by bringing together non-scholars and experts from archaeology, anthropology, heritage studies, environmental studies, law, history, and political science to address key issues in archaeology and heritage. During this seminar, one might ask how to respond to global challenges that affect people and their cultural heritage and the role of restorative justice in co-conserving heritage in the future; others might ask what the critical approaches and practices are for dealing with heritage threatened by crises such as war. This course seminar is an inclusive face-to-face event for students, scholars, and the public. The seminar will cover different geographical areas, such as Central America and the Caribbean, Europe, Asia, and Africa. These broad geographical areas provide an opportunity to navigate the differences and similarities in approaches to archaeology and heritage practices and discourses. The proposed themes for the seminar are: 1. doing decolonial and postcolonial archaeology and heritage: where are we now?; 2. climate change, archaeological heritage and restorative justice; 3. heritage, law, armed conflict, and United Nations regulations; 4. decolonial museums and repatriation of archaeological objects in postcolonial countries; 5. archaeologies in Central America and the Caribbean; and 6. heritage practitioners and community voices in heritage-making.	Dr. Joseph Sony Jean, j.s.jean@hum.leidenuniv.nl

59	**Medieval @ Universiteit Leiden: An interfaculty platform for research, education and outreach** Verspreid over diverse faculteiten en instituten houden meer dan 100 Leidse wetenschappers zich bezig met de Middeleeuwen in hun onderzoek, onderwijs en outreach. Middels deze KIEM-beurs aanvraag willen we deze wetenschappers met elkaar in contact brengen en de zichtbaarheid van het Leidse onderzoek en onderwijs op het gebied van de Middeleeuwen intern en extern vergroten. Dit doen we door middel van het ontwikkelen van een online portaal (working title: “Middeleeuwen @ Universiteit Leiden” / “Medieval @ Universiteit Leiden”) en het organiseren van een lezingenserie. Op het online portaal brengen we informatie samen over bestaande initiatieven op het gebied van onderzoek (e.g. grote en kleine onderzoeksprojecten; informatie over de collectie middeleeuwse handschriften van de Leidse UB), onderwijs (e.g., de Minor Middeleeuwen en de Vroegmoderne Tijd) en ‘outreach’ (e.g., The Leiden Medievalists Blog; de podcast Middeleeuwse Toestanden, media-optredens van Leidse onderzoekers). Middels de lezingenserie brengen we niet alleen het nieuwe portaal onder de aandacht, maar bevorderen we ook contact, kennisuitwisseling en gemeenschapsgevoel van Leidse onderzoekers uit verschillende disciplines. Met dit project streven wij de volgende doelen na: 1. De aantrekkingskracht van de Universiteit Leiden voor studenten en onderzoekers met interesse in de Middeleeuwen vergroten. 2. Leidse mediëvisten zichtbaarder maken buiten de universiteit, onder andere voor journalisten, zodat hun impact op het gebied van wetenschapscommunicatie wordt vergroot. 3. Interdisciplinaire samenwerking tussen medewerkers bevorderen door op het online portaal een overzicht te bieden van alle medewerkers die zich met de Middeleeuwen bezighouden en hen door middel van de lezingenserie in contact te brengen.	Marlisa den Hartog, m.i.den.hartog@hum.leidenuniv.nl
60	**Academic Life path: A Board Game for Reflection and Dialogue on Career Paths and Dilemmas in Science** Stel, je ziet een oproep om een Kiem-beurs aan te vragen en hebt een geweldig idee, maar weinig tijd. Je moet een artikel reviseren, studenten wachten op feedback en je inbox stroomt over. Wat doe je? A) Je besluit het idee te laten liggen voor een volgende ronde, hopend op een rustigere periode. B) Je besluit ervoor te gaan omdat je een briljant idee hebt voor een bordspel over de academische levensweg, waardoor je studenten langer moeten wachten. In ons werk komen we dagelijks dergelijke dilemma’s tegen, die de waarde van onze tijd en keuzes weerspiegelen. Hoe bereiken we ons doel? De academische gemeenschap is in beweging, met toenemende erkenning en waardering voor diverse talenten, wat vragen oproept over loopbaanpaden die we kiezen en hoe we onze talenten benutten. Om deze belangrijke vragen bespreekbaar te maken, hebben wij een uniek bordspel ontwikkeld: Academische Levensweg. Spelers trekken een karakterkaart, dobbelen om ervaringen op te doen en worden geconfronteerd met dilemma’s en uitdagingen. Dit dwingt hen op een speelse manier na te denken over werk-privébalans, collegialiteit en academische excellentie. Het spel stimuleert reflectie en discussie over wat het betekent om wetenschapper te zijn in de huidige maatschappij. De behoefte aan het spel blijkt uit de overweldigende reacties (>250) op het prototype. Collega’s van verschillende universiteiten, ook internationaal, tonen interesse. Met de Kiem-beurs willen we het spel uitwerken tot een bruikbaar eindproduct dat gedeeld kan worden, waarin perspectieven vanuit verschillende faculteiten verwerkt worden, wat bijdraagt aan de beweging van Erkennen en Waarderen in de academie.	Kiki Zanolie, c.k.k.zanolie@fsw.leidenuniv.nl
61	**Preparing SoUnD: The Sound of Unknown Discoveries** Most forms of modern cooperation between natural sciences and artistic research are dedicated to artistic interventions to comment on existing insight in the natural sciences. With our proposed project “The Sound of Unknown Discoveries” (SoUnD) we call for an	Anke Haarmann, a.haarmann@hum.leidenuniv.nl

	experimental collaboration with feedback loops between researchers, aiming at gaining knowledge together. SoUnD joins an astrochemist, a sound-designer and a philosopher, with the aim to interpret interstellar chemical reactivity through digital composition to gain new and unexpected insight. Chemical bonds can be interpreted as (molecular) frequencies, and this is at the heart of our hypothesis that it is optimally suitable to be explored as audible frequencies. Computational surface astrochemistry deals with the study of molecular ice mantles covering cold dust grains in space. Two themes can be identified where frequency analyses are important: (I) energy flow in molecular ices and (II) energy landscapes of interstellar reactions. We propose here to integrate sound composition and epistemological analysis into this research line via: (I) statistical sound, (II) musical diagrammatics and (III) sound-design diagrammatics. This way, we test how through experimental, creative composition, calculated astrochemical data can be made to resonate with intuitive understanding, so that what is not yet understood can emerge aesthetically. To embark on this joint research project between the Faculty of Science and the Faculty of Humanities, a fundamental phase of learning to understand each other is necessary. The KIEM grant will be employed for that purpose and would form the basis for a comprehensive research project and follow-up funding.	
62	**Hands-on visualizing protein aggregates** Accumulation of misfolded proteins is a hallmark of neuromuscular diseases and in aging. In many neuromuscular diseases, protein aggregate formation underlies pathogenesis. The structural features of pathogenic aggregates might differ from aggregates forming due to aging, indicating a distinct mechanistic pathway in disease progression versus natural aging. Label-free imaging could unravel structural differences between pathogenic and non-pathogenic aggregates in intact living cells. By utilizing combination of advanced techniques such as high resolution holotomography imaging and single-cell force mapping researchers can achieve high-resolution visualization of these aggregates without the need for labelling, preserving the native cellular environment. This interdisciplinary collaboration, bringing together expertise from two distinct faculties: human genetics and LACDR. The genetics team focuses on generating a new unique cell model with specific mutations that contribute to the formation of misfolded proteins. The biophysics team will use advanced imaging techniques to detect and characterize the aggregates and investigate how these mutations impact the physical properties of nucleus/cells. Further, it can allow correlation between structure and cell biophysical features as robust quantitative physiological readouts. in single cells. This not only enhances our understanding of protein aggregation processes but also aids in identifying potential therapeutic targets by linking aggregate morphology with specific cellular dysfunctions.	Vahid Sheikhhassani, v.sheikhhassani@lacdr.leidenuniv.nl
63	**Identifying and Integrating Interdisciplinary Learning Goals and Methods for Wicked World Problems** In collaboration with African partners, this project aims to: (i) identify essential learning goals and teaching methods for students in higher education to learn to effectively engage with complex, interdisciplinary, “wicked” problems; and (ii) explore realistic ways to integrate these goals and methods into educational curricula. The outputs include a systematic review of necessary skills and content goals, a best practices overview for teaching these objectives, and practical recommendations for curriculum integration at Leiden and partner institutions. The systematic literature review will be conducted by student assistants and focus on the state-of-the-art best practices for teaching students to engage with wicked problems. The discussion sessions will involve a working group of stakeholders from Leiden and African partner universities. Three key working group meetings will guide the project: an initial meeting to refine methods for the review, an interim meeting to discuss preliminary findings, and a final meeting to present results and discuss implementation and follow-up activities (including further grant proposals). Additional funding is sought to hold the interim or final meeting at an African partner university. The timeline spans from September 2024 to the summer of 2025, covering research design, data collection, analysis, and reporting/publication.	David Ehrhardt, d.w.l.ehrhardt@luc.leidenuniv.nl
64	**Leiden Health and Well-being Network: an interdisciplinary community** Universiteit Leiden heeft een sterke positie op het gebied van gezondheid en welzijn. Zowel op lokaal, regionaal als (inter)nationaal niveau. Medewerkers van universiteit Leiden werken regelmatig samen in inter- en transdisciplinaire partnerschappen (bv in LHSC, LmdS, LUMAN, LBSP, Medical Delta en LDE). Vanuit alle faculteiten van de universiteit en het LUMC houden veel medewerkers zich dagelijks bezig met gezondheid en welzijn. We richten ons op alle bevolkingsgroepen, van jong tot oud, al ziek of nog gezond. Hierbij kijken we vanuit diverse disciplines naar gezondheid en welzijn, denk aan biomedische, sociale, institutionele, technologische, culturele, historische en juridische aspecten. Maar de samenwerkingen rondom gezondheid en welzijn gebeuren nu voornamelijk vanuit een enkele faculteit. Een overstijgend ecosysteem en een Leids profiel rondom gezondheid en welzijn bestaan nog onvoldoende. Deze KIEM-aanvraag is geïnspireerd op de KIEM-symposiareeks over inter- en transdisciplinair samenwerken en heeft een tweeledig doel: 1. De Leidse universitaire gemeenschap rondom welzijn en gezondheid bijeenbrengen. 2. Universiteit Leiden beter profileren op het thema gezondheid en welzijn.	Susanne Roodhuyzen, s.a.roodhuijzen@fsw.leidenuniv.nl
65	**Misinformation in the General Practice - Broadening our view on misinformation regarding contraception and supplements**	Marieke Adriaanse, m.a.adriaanse@fsw.leidenuniv.nl

	Healthcare professionals have been concerned about health misinformation on topics of nutritional supplements and contraception. To combat misinformation and associated consequences regarding health damage and increased pressure in the healthcare system, the present project aims to acquire an improved understanding of who is susceptible to what types of misinformation, and which factors determine information seeking behavior and message acceptance of these topics. We aim to look beyond access and volume to accurate information (i.e., increasing knowledge) by taking a broader perspective that includes factors related to social processes (identity, norms) and trust in science in general and healthcare professionals in particular as well. The ultimate aim of the project is to inform interventions aimed at battling health misinformation. The project is a collaboration between the medical professionals and researchers and behavioral scientists and will consist of two large questionnaires about the topics of nutritional supplements and contraception in the general population.	
66	**Who is afraid of constitutional review? Legal, economic and political insights from the Brazilian experience** Op 10 juni 2024 werd het rapport van de Staatscommissie Rechtsstaat gepubliceerd, getiteld "De gebroken belofte van de rechtsstaat – tien verbetervoorstellen met oog voor de burger". Voorstel nummer 5 van de commissie bepleit het afschaffen van het toetsingsverbod van parlementaire wetten aan de Grondwet (art. 120 Grondwet). Het toekomstige kabinet-Schoof heeft dit voorstel blijkens in het Hoofdlijnenakkoord omarmd. De discussie over rechterlijke constitutionele toetsing is echter omstreden. Tegenstanders wijzen op de controlerende rol van het Parlement, en vrezen voor politisering van de rechterlijke macht. Voorstanders zien het als een manier om de rechtsstatelijke cultuur te versterken en burgers beter te beschermen. Ons project beoogt deze discussie te verbreden aan de hand van een wetenschappelijk onderbouwde interdisciplinaire benadering, waarbij de Braziliaanse ervaring met constitutionele toetsing centraal staat. Brazilië combineert geconcentreerde controle door het Hooggerechtshof met diffuse controle door lagere rechters, wat nuttige inzichten biedt voor Nederland. De ervaringen uit Brazilië laten zien hoe een nieuwe constitutionele orde en democratische instituties zich kunnen ontwikkelen tezamen met rechterlijke toetsing. Brazilië biedt inzichten vanuit de *global south*, een perspectief dat slechts zelden in onderzoek naar de Nederlandse situatie aan bod komt. Door een workshop te organiseren met Braziliaanse en Nederlandse experts willen wij nieuwe inzichten aanjagen door constitutionele toetsing vanuit juridisch, politicologisch en economisch perspectief te bespreken en nieuwe samenwerkingen binnen en buiten de rechtenfaculteit van de Universiteit Leiden ontwikkelen.	Dr. Luísa Pinto e Netto, l.c.pinto.e.netto@law.leidenuniv.nl
67	**EXPLORATIONS IN INTERSECTIONAL IDENTITY IN SOUTH ASIA: CASTE, RELIGION, RACE, AND GENDER** The project titled “Explorations in Intersectional Identity in South Asia: Caste, Religion, Race, and Gender” brings together several interdisciplinary perspectives and scholars. The objective of the project is to examine how the intersections of caste, religion, race and gender are embodied and expressed in the face of identity-based discrimination in South Asia. The project will foreground the affective and emotional registers of embodiment in acts of resistance to discrimination that have been relatively underexplored. The project will have three components: 1) interdisciplinary academic network building leading to a website involving scholars from history, anthropology, political science, religion, and international studies 2) student awareness, learning, research, and participation from across faculties who study South Asia, and 3) finally, a workshop/conference on this theme including teaching two interdisciplinary masterclasses. The two applicants are from the fields of anthropology, history, and cultural studies and bring together the humanities and social science methods and approaches to the issue of identity in South Asia. The applicants will act as the core organizers and coordinators of the project, but we hope to develop a team from within the network, especially comprising students and early career scholars, who can keep the network operational in the future.	SANJUKTA PODDAR, s.poddar@hum.leidenuniv.nl
68	**Picturing Scholasticide: The Future of Higher Education in Palestine** Imagining Scholasticide is a multimodal exhibition of the scholasticide in Gaza. Through photography, testimonies, and the curation of additional resources, it depicts the destruction of the twelve universities in Gaza, and places it in the longer history of the onslaught on scholarly life in Palestine. The project draws on visual anthropology and social-legal scholarship to explore the everyday life of scholasticide, as well as the theoretical and legal underpinnings of this term that is emerging out of the current moment, but has not received much scholarly attention yet. The exhibition will be both physical and online. We will showcase the physical exhibition first in Leiden University buildings, and public spaces in Leiden, before letting it travel through the country. The online exhibition offers additional sources, and offers local organizers the opportunity to create their own physical exhibitions out of it. The project will take place during the academic year 2024/2025. In September 2024, we will assemble a team of committed researchers and students, to collectively research the scholasticide in Gaza further, and reach out to potential photographers (who will be compensated for their work). In November, we will hire a research assistant to aid in website development, and setting up the crowdsourcing of additional materials. By April, we will finalize the exhibition, and in May, we	Matthew Canfield, m.c.canfield@law.leidenuniv.nl

	will launch the traveling exhibition. Throughout the process, we will be raising awareness and foster ongoing conversations about what the role of academics and universities should be.	
69	**Our laboratories are going green** (Bio)chemical labs use a lot of energy and produce a lot of waste. Although many researchers and students would like to conduct their research in the most environmentally friendly way possible, this is not yet a common method for our scientists. The Leiden Institute of Chemistry of the Faculty of Science, the Archaeological Sciences Department of the Faculty of Archeology and the Green Labs LUMC would like to bring about change by joining their current expertises and perspectives, by community building and creating awareness, by making use of LEAF (Laboratory Efficiency Assessment Framework), by purchasing more environmentally friendly small equipment, and by using the new insights for future grant applications and education.	Lian Olsthoorn-Tieleman, l.olsthoorn@lic.leidenuniv.nl
70	**Feasibility to change the timing of physical activity among individuals at risk of cardio-metabolic diseases** Cardio-metabolic diseases are widespread and put a large burden on health care and society, emphasizing the need for interventions that reduce the risk upon these diseases. The timing of physical activity (PA), the time of day when PA is performed, may be an interesting novel target for interventions, as it has recently been related to the risk of cardio-metabolic diseases. For instance, we have previously shown that engaging in PA in the afternoon and evening seems optimal for insulin sensitivity. However, before interventions can be developed, it is crucial to determine if individuals at risk for cardio-metabolic diseases are willing and able to adjust their PA timing (i.e., feasibility). Without insights into feasibility, even theoretically sound interventions may fail in practice because individuals will not participate. Therefore, the overarching aim of this interdisciplinary project is to examine the feasibility to change timing of PA among individuals at risk of cardio-metabolic diseases. We propose a new collaboration between epidemiologists of Clinical Epidemiology (LUMC) and behavioural scientists of Social and Behavioural Sciences. More specifically, we investigate (1) the willingness and barriers to consider and adopt timed PA, and 2) which individuals may be most apt to undertake these changes. Moreover, as how one feels is a strong predictor of behaviour maintenance, we will explore 3) if timing of PA is related to mental health. By doing so, we integrate questions of aetiology (efficacy) with behavioural feasibility (effectiveness) regarding PA timing to strengthen future implementation of personalized timed PA interventions.	Jeroen van der Velde, jeroen.vandervelde@lumc.nl
71	**Using Efficient Chemistry to Identify New Antibiotics to Treat Clinically Relevant C. difficile Infections** Antibiotics are of utmost importance to the healthcare system as they are needed to treat bacterial infections and to enable modern surgical procedures. Nevertheless, as antibiotics usually also wipe out the healthy human microbiome, secondary infections with Clostridioides difficile are common after antibiotic treatment resulting in various symptoms ranging from diarrhoea to life-threatening inflammation of the colon. While C. difficile infections can usually be treated with antibiotics, recurrence of the infections, limited treatment options and development of resistance are important clinical challenges. For these reasons, new antibiotics against C. difficile are urgently needed. In order to efficiently develop such new antibiotics, we will form an interdisciplinary team with synergistic expertise in chemistry and molecular microbiology. The chemistry group from the Leiden Institute of Chemistry at the Faculty of Science has ample experience in the efficient synthesis of covalent inhibitors as candidate antibiotics with increased chances for activity. The molecular microbiology group from the Leiden University Medical Center has longstanding expertise with the culturing and testing of C. difficile and is part of the Dutch National Expertise Center for C. difficile infections, which monitors the current variants of C. difficile in Dutch hospitals. In this way, we have access to the most relevant clinical isolates for testing. The proposed collaborative research team, thus, forms an ideal cross-faculty unit to test the most promising candidate antibiotics in the most clinically relevant C. difficile strains and, thereby, to optimize the chances to efficiently identify new antibiotics.	Miriam van der Veer, m.s.van.der.veer@lic.leidenuniv.nl
72	**An Interdisciplinary Network for Forgery & Fake News Research** Vervalsingen, van fake news tot verzonnen nationale geschiedenissen, staan sterk in de belangstelling en de afgelopen paar decennia is het onderzoek naar dit onderwerp sterk gegroeid, in allerlei disciplines. Met name creatieve vervalsing is een populair onderzoeksveld: dit genre is te vinden in teksten, beelden en objecten en heeft vaak een grote maatschappelijke relevantie. Op het moment wordt onderzoek naar vervalsing nog gekenmerkt door een streng disciplinaire benadering: kunsthistorici bestuderen bijvoorbeeld alleen visuele vervalsingen en tekstwetenschappers kijken nauwelijks naar materiele aspecten. Dit is jammer, omdat vervalsing juist zeer interdisciplinair van karakter is en disciplinair gericht onderzoek vaak aspecten over het hoofd ziet. Een ander probleem is dat vervalsingsonderzoek nog sterk nationaal gericht is en er vaak niet over de eigen grenzen gekeken wordt. Dit project beoogt een internationaal netwerk op te zetten van wetenschappers die in alle verschillende disciplines onderzoek doen naar vervalsing zodat men van elkaars werk en methodes kan leren, verbanden kan leggen en interdisciplinaire samenwerkingen gemakkelijker tot stand kunnen komen. Het project wil dit bereiken met het opzetten van een website en een publicatieplatform en het organiseren van twee interdisciplinaire symposia over onderwerpen die onderzoek en	Jacqueline Hylkema, j.j.hylkema@luc.leidenuniv.nl

	onderwijs in de verschillende disciplines in vervalsingsstudies verbinden, verdiepen en verrijken.	
73	**Rules for a lawless world? Exploring the tension between the 'rules-based international law' and international law** This project aims to convene an interdisciplinary symposium on the state of the international legal order. Two ongoing wars, Russia's war on Ukraine and Israel's war on Gaza have put in sharp relief the rivalry between international law and the 'rules-based international order'.1 This project will critically reflect on the consequences of the growing confrontation between the defenders of the so-called 'rules-based international order' and the defenders of international law for the prospect of a law-governed world, or its potential collapse. We seek to gauge the implications of this normative divide on the ordering, protective and emancipatory functions of international law in order to grasp the direction in which the world is heading, whether we are seeing the strengthening of existing rules or their unravelling and replacement with new ones, and consequently, what, if anything, can be done to shape these developments in a way that approximates the shared aspiration of the world ruled by the force of law, and not the law of force.	Gjovalin Macaj, g.macaj@fgga.leidenuniv.nl
74	**BiOLIV3D-MASH: Development of a new bioprinted 3D liver model for studying complex cell interaction during Metabolic dysfunction-Associated SteatoHepatitis** Metabolic dysfunction-associated steatotic liver disease (MASLD) affects one third of the world's population, even more in patients with obesity and type 2 diabetes. MASLD has a complex pathophysiology, characterized by hepatic lipid accumulation, insulin resistance, lipotoxicity, inflammation and progressive fibrogenesis. Its spectrum extends from isolated steatosis to steatohepatitis (MASH), fibrosis, cirrhosis and hepatocellular carcinoma, with limited pharmacotherapies. The interaction between hepatocytes, endothelial cells, Kupffer cells and stellate cells within the dysmetabolic liver is central to MASH progression but remains incompletely understood. Hence, there is an urgent need to develop human-based in vitro liver models comprising the essential hepatic cell lineages in order to study their complex interplay during MASFD/MASH progression and accelerate the development of effective drug therapies. Conventional 2D culture models are limited in replicating the cell interactions within human tissues. Interestingly, recent advances in 3D bioprinting technology have led to significant progress in the creation of mini-organs that replicate on a smaller scale the architecture and functionality of full-sized human organs. BiOLIV3D-MASH constitutes an innovative interfaculty pilot project aiming 1.) to develop a multi-cellular human mini-liver by gradual implementation of various human cell lines using a 3D bioprinter, and 2.) to establish and validate a disease model of MASLD/MASH using a combination of pro-steatotic, proinflammatory and pro-fibrotic stimuli followed by determination of immunometabolic functions. Altogether, this revolutionary new human 3D liver model could be used to elucidate cell-cell crosstalk and test new combination therapies targeting one or many of the cell types involved in the development of MASLD/MASH.	Bruno Guigas, b.g.a.guigas@lumc.nl
75	**WODs within Walls: Introduction of CrossFit in a correctional facility** Recent systematisch onderzoek heeft aangetoond dat sporten een positieve impact heeft op het mentaal en fysieke welbevinden van gedetineerden (zie o.a. Robinson et al. 2019). Naast fysieke voordelen, zoals daling van obesitas en chronische ziektes, zijn er tevens psychologische voordelen te onderkennen. Onderzoek duidt dat enerzijds de levenskwaliteit en tevredenheid toenemen, en anderzijds negatieve gevoelens, waaronder stress, angst en depressieve symptomen, afnemen. Het huidige sportaanbod in detentie kan beter afgestemd worden op de noden en het conditievermogen van gedetineerden, aangezien dit de participatie kan bevorderen (zie Papa et al., 2021). De introductie van meer *community-oriented* sporten, waaronder CrossFit, zou naast individuele voordelen (bv. algemeen welzijn), ook gunstig zijn voor de sociale cohesie *intra muros*. De deprivatie van veiligheid en (zinvolle) dagbesteding zijn veelvoorkomende gevangenispijnen (zie Sykes, 1958). Door samen te sporten met gedetineerden met diverse achtergronden, leeftijd en indexdelicten, kan het gevoel van samenhorigheid aanwakkeren tussen medegedetineerden en staf. Dit draagt bij aan een daling van wangedrag, en bijgevolg een leefbaar detentieklimaat. Verder kan sporten de uitzichtloosheid en verveling van gedetineerden inperken. Bij CrossFit staan zingeving, verbinding, inclusie en persoonlijke doelen centraal. Deze sport kan een positiever zelfbeeld genereren, omdat leden een (sociale) identiteit verkrijgen en meer vertrouwen in hun eigen vooruitgang. Hoewel CrossFit ondertussen onderdeel uitmaakt van het sportaanbod in 11 penitentiaire inrichtingen (hierna: PI) in de VS, is tot op heden nog geen wetenschappelijk onderzoek gevoerd naar de effecten van deze specifieke sport op het mentaal welbevinden van gedetineerden. Omwille van deze reden, wordt door middel van een pilootproject in een Nederlandse PI, getracht CrossFit te introduceren op Europese bodem. Aangezien het sterke verband tussen sporten en slapen, wordt de slaapkwaliteit van gedetineerden mede onderzocht als mogelijke mediatie- en/of moderatievariable tussen CrossFit en mentaal welbevinden van gedetineerden.	Lys Van de Voorde, l.van.de.voorde@law.leidenuniv.nl
76	**The diverse governance logic of smart government in East Asian countries** The rapid integration of artificial intelligence (AI) and digital technologies into governance systems is evident in both Western and non-Western contexts. While recent AI regulations focus on risk control, human rights protection, and accountability, much remains unknown regarding political, bureaucratic, and governance logic and social acceptance involved in building smarter states.	Hsini Huang, h.i.huang@fgga.leidenuniv.nl

	The technological characteristics and radical development of AI reflect different political regimes (e.g. democracy vs. authoritarianism), accountability forms (e.g., legal vs. political vs. administrative), power dynamics (e.g., horizontal vs. vertical), and cultural backgrounds (e.g. Christianity vs. Confucianism). However, little is known about cross-national variations in governments' logic and perceptions toward AI policy and practices, particularly among similar political regimes. Particularly, existing literature seems to predominantly focus on Western countries. To enrich the contextual and theoretical diversity of AI/digital integration literature in non-Western settings, this project aims to examine East Asian countries. It seeks to provide a comprehensive understanding of AI implementation and bureaucratic reforms in government by fostering dialogue among scholars from political theory, regional study, law, public policy, public administration, and information systems. Research into smart government and digital reform with the implementation of emerging technologies in the public sector can benefit from the integration of expertise in a) building conceptualization and theory; b) developing a comparative framework for mixed-methodology data collection and analysis; c) establishing insights into potential impacts, consequences, and solutions. This project aims to bring experts from multiple disciplines and research domains to foster inspiring conversations for cross-disciplinary learning and broader international and societal collaborations.	
77	**Bone Under the Microscope** As archaeologists we frequently (macroscopically) look at bones to estimate age-at-death, study diseases, and understand what life was like for people in the past. Clinicians and medical researchers, on the other hand, rely on scanning technologies to 'see inside' the body. This project unites these two perspectives by taking a deep dive into the microstructure of historic Dutch bones. We will study human skeletal remains curated at the Faculty of Archaeology by micro-CT scanning them at LUMC facilities. With detailed micro-CT scans, we can examine bone quality in the early modern Netherlands (1650-1850) and compare that to bone quality today. We hypothesize that diseases, such as vitamin D deficiency, will be more common in the past than today. The outcome of this project will be to inform whether rates of vitamin-D deficiency have changed or have stayed consistent through time. The expected products of this project are at least two academic publications, one international conference presentation, and a Leiden-based conference, which will bring scholars interested in bone quality together.	Sarah Schrader, s.a.schrader@arch.leidenuniv.nl
78	**Litigation in Name of the Public Interest** Belangenorganisaties lijken de rechtsgang steeds vaker strategisch in te zetten om politieke, maatschappelijke of juridische verandering te realiseren. Denk bijvoorbeeld aan de klimaatzaak van Urgenda, de stikstofzaken van Mobilisation for the Environment, en de procedures over de kwaliteit van de asielnoodopvang van Vluchtelingenwerk Nederland. Deze strategisch procederende belangenorganisaties en hun rechtszaken bevinden zich op het grensvlak tussen politiek en recht. In dit onderzoeksproject combineren we juridische, politicologische en bestuurskundige inzichten om meer inzicht te krijgen in de aard en omvang van dit fenomeen en de wijze waarop procederen zich verhoudt tot andere (klassieke) strategieën van beleidsbeïnvloeding. Daarvoor zetten wij een survey uit onder Nederlandse belangenorganisaties. We gebruiken het survey-instrument dat eerder ontwikkeld is binnen het Comparative Interest Group Survey Project uit 2018, maar met belangrijke aanpassingen om de vraagstelling beter aan te laten sluiten op de Nederlandse juridische context waarbinnen belangenorganisaties al dan niet toegang zoeken tot de rechter. Zo komen we tot een unieke longitudinale en interdisciplinaire benadering van het fenomeen van strategisch procederende belangenorganisaties, en leveren we een belangrijke eerste systematische, empirische bijdrage aan het verder doordenken van de democratischrechtsstatelijke implicaties ervan.	Rowie Stolk, r.stolk@law.leidenuniv.nl
79	**Psychosocial resilience factors as mechanisms of recovery in critically ill patients after intensive care unit stay** Bij ernstige ziekte kan een behandeling op de Intensive Care (IC) noodzakelijk zijn. Deze intensieve zorg wordt steeds beter en daardoor overleven steeds meer ernstig zieke patiënten een opname op de IC. Deze gunstige ontwikkeling heeft een keerzijde. Er is namelijk weinig aandacht voor de gevolgen van een IC opname op de langere termijn. Er is vooral weinig bekend over de psychologische, cognitieve en emotionele consequenties van een IC opname. Dit wordt echter steeds belangrijker aangezien het aantal overlevenden van een ernstige ziekte blijft toenemen. Dit project heeft als doel te onderzoeken wat de beste omstandigheden zijn om gezond mentaal te herstellen van een IC opname. Hiervoor worden beschermende veerkracht factoren in kaart gebracht naast risico factoren voor het ontwikkelen van symptomen van trauma, angst, depressie of cognitieve klachten, tezamen ook bekend als Post-Intensive Care Syndroom (PICS). Dit wordt onderzocht middels een pilot met verschillende meetmethoden, waaronder een systematische review van de literatuur en een kwalitatief onderzoek onder professionals middels een Delphi methode. Deze gegevens worden vervolgens besproken in een expert meeting met als doel om de klinische zorg rondom deze patiënten populatie te verbeteren en vervolg onderzoek en subsidie aanvragen te inventariseren. Meer inzicht in veerkrachtfactoren kan helpen om preventieve maatregelen te nemen en om psychologische behandelingen te ontwikkelen die optimaal gericht zijn op de behoeften van deze patiëntengroep met complexe multimodale klachten.	Judy Veldhuijzen, D.S.Veldhuijzen@fsw.leidenuniv.nl
80	**Establishing a Permanent Network to Foster Interdisciplinary Encounters between Assistant Professors**	Dr. Stephan Hacker, s.m.hacker@lic.leidenuniv.nl

	Assistant Professors are in a unique position, in which they can actively shape the direction of their entire independent scientific career. At this career stage, connecting to peers from different faculties and disciplines is of extreme importance to lay the foundation for fruitful interdisciplinary collaborations. **Our goal in this initiative is to facilitate encounters between Assistant Professors of the different faculties of Leiden University and to enable new connections that will form the seed for many long term, interdisciplinary projects in research and teaching**. To realize this ambition long-term, we are convinced that a permanent, local Assistant Professor Network that institutionalizes these encounters is needed. For this purpose, we formed a core team of Assistant Professors across three faculties with ample experience in similar networks. We will organize recurring events open to all Assistant Professors of Leiden University to establish new interdisciplinary connections. In these meetings, we will have professional match-making sessions, in which Assistant Professors will present their interdisciplinary research and teaching ideas and, in this way, are able to find partners across our faculties to realize these projects with. In this way, our initiative will **bring Assistant Professors from all of our faculties together in an environment, in which they can most efficiently form new teams for interdisciplinary research and teaching**. Due to the permanent establishment of this network, the initiative will continuously lay foundations for a variety of interdisciplinary projects and collaborative funding applications even far beyond the initial funding period of the KIEM grant.	
81	**Unpacking the uneven global environmental and health burden of consumer groups** The transition toward a sustainable food system demands a global shift in diets. To achieve this, we need to understand the food habits of billions of consumers. Yet, global food system models do not distinguish which consumers drive environmental impacts, nor their roles in sustainable food futures. Microdata on food consumption (e.g. by gender and age) offers the potential to pinpoint high-impact and vulnerable consumer groups in sustainable dietary transitions. Enriching global food system models with dietary microdata remains hindered by technical demands of linking disparate, unaligned, and conflicting data, using methods from macroeconomic, environmental, and nutritional modelling. We have largely overcome these challenges in our work using advanced, interdisciplinary modelling techniques. Our country-level analysis demonstrates the novel insights and feasibility of such work, using dietary microdata to assess the uneven environmental impacts and health burden of consumer groups. This project seeks to combine and scale our existing work on micro-level dietary impact assessment on environmental sustainability (Taherzadeh) and public health (Kiefte-de Jong). Funding will support the first global assessment of dietary sustainability and nutrition across consumer groups, using open-access data. The outcome of this work will identify how and where food system actors can support sustainable food systems and nutrition, across 185 countries, otherwise hidden by nationally averaged food consumption modelling. Such collaboration represents a new cross-faculty interdisciplinary collaboration between the applicants and stands to support future, larger grant applications integrating public and environmental health in food transition modelling.	Oliver Taherzadeh, o.a.taherzadeh@cml.leidenuniv.nl
82	**RNA4US: Researching New Avenues for Antivirals Against Alphavirus Unique RNA Structures** Alphaviruses like Chikungunya virus and Sindbis virus are RNA viruses that are transmitted by mosquitoes, causing fever, severe joint pain, and occasionally (fatal) neurological disease in humans. Currently no effective vaccines or antivirals are available. This research proposal aims to elucidate the role of a conserved RNA structural motif in these alphaviruses that may play a role in their replication and hence provide an excellent target for developing anti-viral drugs. Analysis of the 3D structure of the RNA will be performed at the Leiden Institute of Chemistry (LIC) making use of their expertise and infrastructure. Studies with mutant viruses will be carried out at the Leiden University Medical Center (LUMC) at the Molecular Virology laboratory of LUCID using their virological expertise, tools and BSL3 facilities. The results of this study will provide insight into the role of RNA structures in the replication of alphaviruses and their potential as anti-viral drug targets.	Dr. Rene Olsthoorn, olsthoor@chem.leidenuniv.nl
83	**‘Ageing & Society’: a young collaborative network within the oldest Dutch University** Leiden University will celebrate her 450th dies in 2025. In our ageing and very vital Leiden university, various experts are working on the theme ‘Ageing & Society’ in education and research. Within the university, this theme can be defined very broad ranging from biological mechanisms of ageing plants to the quality of dying in patients with dementia, and from the lives of older people in the prehistoric era to developments in the Dutch system of retirements and pensions. Since the ageing of our society presents both complex challenges and complex opportunities, this demands interdisciplinary knowledge and innovative approaches. Building on connection and collaboration between the Leiden University experts from different disciplines and faculties will fuel new developments in the Ageing & Society field, including research and education. Based on recent LUMC experiences and inspired by an example of the Fudang University in Shanghai, we aim to build a Leiden University network of experts, researchers and educationalists on the theme Ageing & Society. After identifying colleagues from all Leiden University faculties, we will organise network-meetings for connection, exchange and matchmaking. We aim to organise a university-wide event open to all relevant stakeholders and the general public. In the last phase, we will conclude the project by strengthening collaboration in existing research and educational programmes, and exploring future plans for this new network ‘Ageing & Society’. Activities Step 1: identifying AGEING & SOCIETY experts within Leiden University	Prof.dr Jacobijn Gussekloo, jgussekloo@lumc.nl

	Step 2: 2 meeting(s) of LEIDEN AGEING & SOCIETY NETWORK Step 3: LEIDEN AGEING & SOCIETY NETWORK event Step 4: next steps for LEIDEN AGEING & SOCIETY NETWORK	
84	**Enhancing skin color diversity in dermatology research through development of objective,unbiased, and non-invasive assessments for skin of color** Although there is a rich diversity in skin color, the fields of skin research and dermatological drug development have historically been centered around light skin types. Most outcome measurement tools for skin color and skin inflammation have been developed and validated only in white-skin, and these are inaccurate for assessment of patients with dark skin tones. As a result, subjects with dark skin types are often excluded from participation in dermatological drug development trials. This has resulted in significant gaps in current-day knowledge on drug effects specifically in skin of color patients, thereby perpetuating health disparities related to suboptimal treatment choices for patients with skin disease and dark skin pigmentation. Here, we propose an interdisciplinary project between the translational dermatology research group at Leiden Academic Centre for Drug Research (LACDR, Faculty of Science) and the clinical skin of color research group at Leiden University Medical Center (LUMC, Faculty of Medicine). The collaborative aim is to start a clinical pilot study to develop non-invasive skin imaging tools to objectively and accurately assess skin color and skin inflammation across different skin types, including varying tones of skin of color. Following completion of the clinical study, we will organize a symposium involving multiple stakeholders to disperse the study results, to foster and intensify existing interdisciplinary collaborations, and start new initiatives to increase skin color diversity in dermatological drug development and improve patient outcomes in clinical practice.	Dr. Deepak Balak, d.m.w.balak@lumc.nl
85	**The development of an interdisciplinary and international minor One health** De kiem-beurs zal gebruikt worden voor de ontwikkeling van een interdisciplinaire minor One health met 4 andere Una Europa universiteiten. De beoogde start van de minor is in september 2026. Er is een noodzaak voor de ontwikkeling van een meer duurzame gezondheidszorg en deze vragen om een interdiscplinaire aanpak zoals wordt beschreven in het One health concept en de Population Health Management (PHM) benadering . Het One health concept erkent dat de gezondheid van mensen, huisdieren en wilde dieren, planten en de wijdere omgeving en de systemen onlosmakelijk met elkaar verbonden en van elkaar afhankelijk zijn, omdat ze niet alleen dezelfde omgeving delen, maar ook veel ziekten. Door een toenemende groei van de menselijke bevolking, die gepaard gaat met klimaatverandering, vervuiling en uitputting van de hulpbronnen op aarde, gezondheidsdisciplines en andere gebieden moeten samenwerken om de toekomstige gezondheid en het welzijn van mens, dier en milieu te garanderen. De PHM benadering van gezondheidsproblemen is vanuit een interdisciplinaire invalshoek en kan assisteren bij het oplossen hiervan. Momenteel is er geen minor over One health beschikbaar voor studenten. De ontwikkeling bestaat uit twee fases. In de eerste fase wordt de opzet van de minor ontwikkeld en hiermee wordt een Erasmus plus subsidie aangevraagd. Met deze subsidie kan de minor verder worden ontwikkeld en heeft de minor structurele financiering. De kiem-beurs zal worden gebruikt als reisbeurs om andere deelnemende universiteiten te bezoeken voor overleg en ontwikkelen van de minor. Een ander doel is leren van elkaars disciplines.	Martijn Sijbom, m.sijbom@lumc.nl
86	**Expression in music: Semantics and emotion** Music and spoken language share commonalities such as communicating through auditory signals and utilizing timing and pitch differences. However, while language primarily conveys semantic meaning, instrumental music is typically considered to be expressive on a more emotional level. However, musicians often aim to communicate specific meanings through their performances. A pilot study with six pianists playing melodies with different metaphors in mind that varied in arousal and valence, found that emotional content primarily drove performance	Rebecca Schaefer, r.s.schaefer@fsw.leidenuniv.nl

	similarities. Measures of keystroke timing and velocity were analyzed and demonstrated a direct effect of mental imagery on motor performance. However, effective communication is determined by the receiver's interpretation. This research, therefore, aims to evaluate how well human listeners can recognize intended performance metaphors in music, considering timing and dynamics. A large online participant group will help understand individual differences in imagery ability, culture, age, and musical background. Additionally, the resulting findings will be applied in to generative music creation, to asses whether human-produced expressive cues can be utilized to improve our knowledge on human-machine interaction in the musical domain. This interdisciplinary research enhances our understanding of brain processes, non-verbal communication and musical performance and interpretation. In addition, the outcomes may inform generative AI in music, addressing criticisms that AI-generated music lacks expressiveness. Teaching these systems how to translate expressive cues to musical features could make AI-generated music more human and emotionally impactful, with applications beyond commercial music in, for example, healthcare settings. Our team, led by experts in psychology, music cognition, AI, and linguistics, seeks to enhance collaboration in domain and pursue additional grant applications.	
87	**Queer Migration Network: Leiden University** With this application, we propose €2675 in funding for a Queer Migration Network, aimed at fostering a community of researchers and undergraduate students interested in how scholars tackle important questions related to migration studies and queer studies, across disciplines including history, social sciences, and law. For example, in order to improve the current problems that LGBTI+ refugees face during migration and the asylum procedure, one needs to consider the lives and experiences of queer migrants (i.e. via oral history, anthropology), the most effective ways to enact change (i.e. via law, public policy), and the NGOs and informal networks that support queer migrants (i.e. via sociology, economics, or media studies.) The grant will strengthen the existing networks that are being forged independently across faculties at Leiden University, and will build new relationships between scholars. The funding would facilitate these connections via a seminar series. While we primarily envision our proposal as events-based, we also emphasize that the Network will foster community in two ways: by engaging with the LGBTQ+ Networks across disciplines at Leiden, we seek to bring together curious students from across the universities who discover overlapping interests in their research interests with doctoral researchers and other research staff; second, we will engage with our existing network of civil society actors, including representatives from NGOs that work with queer migrants, including Stichting Love Planet, Rainbow Den Haag, and COC Leiden.	Andrew DJ Shield, a.d.j.shield@hum.leidenuniv.nl
88	**Developing and Piloting an Interdisciplinary Course on Climate Change Laws: Bridging Faculties for Sustainable Governance** Climate change represents arguably the greatest challenge of our time, impacting ecosystems, societies, and economies globally. Addressing climate change requires a robust, multifaceted legal framework that builds on a multidisciplinary analysis of the problems and dilemmas involved. As climate change accelerates, so does the demand for legal practitioners and other professionals who truly understand the interconnectedness of the geophysical, environmental, economic, and socio-legal factors associated with climate change. In response, this project proposes the development of an interdisciplinary course on climate change, with law and policies at its centre, and designed to equip future professionals with a holistic understanding of climate change. The course, to be designed by a pool of multidisciplinary researchers, aims at integrating insights from climate/environmental science, economics, sociology, and law. It will make students from various disciplines familiar with approaches of climate change other than the one they know, thus facilitating interdisciplinary understanding and dialogue as well as informed policy-making and advocacy for climate change. Creating a classroom in which students from various faculties can learn from each other will in itself contribute to this aim. The course thus developed would be perfect for a university honours course, but could also be offered in other formats across faculties. The project builds on previous initiatives in Indian law schools, initiated by one of the applicants. However, the programme we wish to develop takes this several steps further, by the range of students it will address and the range of disciplines it will include.	Adriaan Bedner, a.w.bedner@law.leidenuniv.nl
89	**A safe Leiden platform for practical experiments and workshops about GenAI** GenAI developments come so thick and fast that they may overwhelm teachers and researchers, with worries about plagiarism, redundancies of specific skills or a general sense of lacking behind. At the same time, many opportunities arise that can help in our daily work. However, this requires an approach that helps staff gain more confidence and practical insights about (im)possibilities of these emerging technologies. One of the most effective of these is via practical workshops with hands-on activities.	Julian van der Kraats, j.van.der.kraats@issc.leidenuniv.nl

	At Leiden University a collaborative group called PrAIA (Practical AI in Academia) consisting of teachers, researchers and supporting staff from different faculties have started organizing these types of activities, to inspire people to use GenAI. PrAIA furthermore aims to develop a toolkit for fellow colleagues and departments to organize their own workshops. However, the use of publicly available GenAI models like ChatGPT or Google's Gemini comes with (relevant) concerns of privacy. Leiden University is currently still lacking a safe, private environment in which to experiment with AI. The current proposal aims to develop such a platform and pilot it in workshops for university staff in which they can safely play, experiment, and learn to use AI in teaching or research that can be transferred immediately to their own daily practice. With this grant an experienced implementation partner can build and configure this platform for GenAI-workshops together with the Leiden University IT-department. Once built, the IT-department can maintain the platform, and PrAIA can implement it in hands-on AI workshops and toolkits for university-wide use.	
90	**CARMA: Community Archive and Repository in Multimodal and Artistic Research** Non-traditional research data and outputs (NTROs), such as films, sound recordings, and dance performances, are generally less visible in the digital scholarly record than their tabular and text-based counterparts. The limited findability and reuse of such resources threatens knowledge production and collaborations in fields where NTROs proliferate – especially the social sciences, humanities, and arts (SSH+A). Responding to this challenge, this project will facilitate transdisciplinary encounters among Leiden University researchers and professional staff from FSW, FGW, and UBL, aiming to (1) improve the visibility of NTROs in the digital scholarly record, and (2) further cultivate a culture of sharing and reuse of these outputs among the SSH+A community. As a first step, we will leverage the network of Leiden's ReCNTR – the interfaculty hub for promoting and innovating multimodal and audiovisual research methods – in developing a 'living laboratory' as a venue for exchanging and integrating diverse knowledges and user needs from the SSH+A research community; as well as from the domains of research data management, open research information, and scholarly communications infrastructure. With the support of a software developer, laboratory members will collaborate on the iterative design and prototyping of a small-scale, community-driven resource that provides a common place for Leiden SSH+A researchers to more visibly catalogue (records of) their NTROs, with an eye towards possible future integration with Leiden's existing research information services, and thus broader inclusion in the digital scholarly record. We call this tool CARMA: Community Archive and Repository for Multimodal and Artistic Research.	Andrew S. Hoffman, a.s.hoffman@fsw.leidenuniv.nl
91	**Sensing and Regulating Plastic Pollution in Urban Contexts: An Interdisciplinary Study of South-Holland** We propose to determine in which soil and/or sediment plastic can be found to identify distribution of plastics in an urban setting and the beginning of the "Plasticene", making use of an interdisciplinary approach. The aim is to assess plastic pollution and associated regulations in cities by investigating macro, meso and microplastics in urban deposition. By employing archaeological and environmental sampling, and evaluation of policy and legal regulations, the main goals of the study are to assign hotspots and map plastic pollution across an urban area, contextualise ambitions for cities to become waste-free in the historical and material framework of the study, and evaluate the limitations of legal regulations concerning urban plastic pollution.	Dr. Ian R. Simspon, i.r.simpson@arch.leidenuniv.nl
92	**In co-creation towards a personalized approach to tackle the high cardiometabolic disease burden in Dutch South Asians** "South Asians comprise 25% of the world's population, but suffer over 50% of the world's cardiovascular deaths" The prevalence of cardiometabolic diseases in the Netherlands is increasing due to unhealthy lifestyles and an aging population, with significant disparities among subpopulations. The South Asian community faces a notably higher risk of developing cardiometabolic diseases compared to the national average, including a 2-fold higher risk of cardiovascular diseases and a 2-4-fold higher prevalence of type-2-diabetes. Increased risk for these cardiometabolic diseases is a complex interplay, associated to factors such as metabolic differences, epigenetic factors and unhealthy lifestyles. However, the exact mechanism driving this higher cardiovascular burden is still unclear. Additionally, it is not well understood which interventions and prevention measures are most preferred and (culturally) acceptable for the South Asian community to help decrease the elevated risk for cardiometabolic diseases.	Janet M. Kist, j.m.kist@LUMC.NL

	Therefore, an interdisciplinary research group in co-creation with the South Asian community aimed at reducing the cardiometabolic health disparities in the South Asian community will address the following primary objectives: Establishing a collaborative network, including sociologists, psychologists, medical and fundamental researchers among departments and faculties of Leiden University to support a community-driven research project. Development of a collaborative research agenda, with research projects, designs, tailored interventions and implementation plans to gain insights, in among others, metabolic- and biopsychosocial factors and to identify barriers and facilitators of current interventions. Writing a draft for a research grant to secure additional funding for extensive research from fundamental research to implementation programs.	