



AARHUS
UNIVERSITY

AARHUS INSTITUTE OF ADVANCED STUDIES



AARHUS INSTITUTE OF ADVANCED STUDIES
AIAS ANNUAL REPORT
2017/18

FIVE YEAR ANNIVERSARY: 2013-2018



AARHUS INSTITUTE OF ADVANCED STUDIES

AIAS



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DIRECTOR'S ACCOUNT OF 2017-2018

The academic year of 2017-2018 has offered several particular challenges in addition to the general everyday running and life of the Institute.

The continuous turnover of Fellows belongs to the general events. However, 2017-18 has offered a particular challenge as the replacement of Fellows was, by far, the most extensive one that has taken place as almost two thirds of the entire Fellow group were replaced at one time. Would the whole culture and ethos of the Institute survive, or would it change drastically? Fortunately, the extensive replacement was successful beyond all expectations, not least thanks to a remarkable effort from the 'remaining' Fellows and from the AIAS admin staff. Obviously, AIAS was thereby changed and developed, but only in the fruitful sense, which is permanently experienced by an Institute of this particular kind, through its continuous replacement of Fellows.

For the international call that had its deadline in January 2018, AIAS has received 233 highly qualified applications for 10-12 fellowships. The extensive evaluation process throughout the spring of 2018, including a triple peer review, an international Selection Board meeting and its decisions, the preparation of employment offers, the conduct of individual negotiation interviews, all proceeded according to the plan.

Yet, this past year has also been characterized by a few less general activities, such as the evaluation of AIAS and the international role that AIAS has played.

THE INTERNATIONAL EVALUATION OF AIAS

Already from the opening of AIAS, it was decided that the Institute should be submitted to an international evaluation after a few years of operation. During the summer and the autumn of 2017, we first completed a comprehensive self-evaluation report, "The First Four Years". Subsequently, the Aarhus University Rector appointed an independent expert panel of four members to carry out the assessment: Dr. Wilhelm Krull, Secretary General,

VolkswagenStiftung (Chair); Prof. emer. Peter Goddard, Institute of Advanced Study, Princeton; Prof. Michal Linal, Director, Israel Institute for Advanced Studies; and Prof. Diana Hicks, Georgia Institute of Technology. In March 2018, the evaluation process culminated in a site visit at AIAS, where the panel held meetings and conducted critical interviews with the AIAS management, with existing and former Fellows, AU department heads and other AU stakeholders, the AIAS Board of Directors, and the AU Senior Management Team. The entire infrastructure, organizational structure, and practice of AIAS were laid bare and assessed critically. The results became available in the form of the panel's report to Aarhus University in late April 2018. In the report, the panel expresses its unconditional praise and recognition of the performance of the Institute, including the ability to build up a genuine institute for advanced study of international format in such short time. In the report, the panel has three main recommendations: that the Institute and the University further consider the governance structure to ensure its operational autonomy, that long-term funding of the Institute is secured, and that special attention is paid to the continuous quality of the management of the Institute. The AIAS Board of Directors and the AIAS Advisory Board have subsequently concurred with the observations and conclusions of the evaluation report.

INTERNATIONAL NETWORKS

As you may know, for the period of 2016-2018, AIAS was elected 'coordinating institute' and chair of the Steering Committee of UBIAS, the global network of University-Based Institutes for Advanced Study. The mandate for this post consisted in updating and formalizing the UBIAS organization. This involved the tasks of updating the UBIAS website, of drafting a set of regular statutes of the organization, and further developing the active cooperation in the coordinating group and in the Steering Committee.

At the global Directors' Conference, "UBIAS in the New World – UBIAS in a New World", in São Paulo, Brazil, in March 2018, the statutes and the entire organizational

upgrade, headed by AIAS, were passed with acclamation. Also in São Paulo, five new members were admitted to UBIAS, which thus today comprises 44 institutes from all over the world. The UBIAS-related work has involved a considerable workload on both the AIAS management and on the staff. Therefore, once the closely defined job had been completed, AIAS decided to step down as coordinating body, and as chair, but to remain an active member of the UBIAS Steering Committee.

In the other important international organization, the European NetIAS, considerable activity has been going on too: a mid-term meeting in Paris in November 2017, and in Budapest in April 2018. The annual network meeting and the Directors' Business Meeting were held, followed by the EURIAS Conference that included presentations by the EURIAS Fellows. In Budapest, AIAS was chosen as host of next year's equivalent event to be held in April 2019. This will be a comprehensive task, where AIAS will look forward to welcoming Europe's most distinguished institutes in Aarhus – many of them for the very first time.

All in all, the international cooperative work helps make AIAS and Aarhus University even more known and respected worldwide.

THE PHYSICAL SPACE OF THE INSTITUTE

For a long time, AIAS has wished to be able to offer better facilities to visitors and cooperative partners. This now becomes a reality by the inclusion of the entire second floor of building 1630, part of which has been used by other units of AU, so far. The facilities are intended to be available to the guests of Fellows, to the appointed AIAS Associates, and to a new scheme (in the pipeline) of AU internal "Senior Associates". However, improved possibilities of scholarly and social exchange for the in-house Fellows at AIAS will also be created.

ACADEMIC LIFE

Most importantly is of course the research work, the intensive, individually defined research carried out by and developed by each and every AIAS Fellow, every day, all year round. Research thrives. It manifests itself as an impressive output in the World's best scholarly journals, and to an increasing extent in the form of grants to Fellows. Life and activities at the Institute still work well: Fellows' Seminars, a steady flow of academic confer-



Photo: Morten Kyndrup welcoming speakers and participants to the AIAS Workshop: Nanomat@AU: Forefront methodologies and advances in nanomaterials characterization. By: Lars Kruse.

ences, workshops, symposia – often held in cooperation with institutes and other units at Aarhus University. One noticeable event to be singled out is the international, multi-disciplinary AIAS Conference entitled "FEAR: Brain, Behaviour, Society" held in December 2017. Originally developed with inspiration from the UBIAS "Topic of the Year", which was exactly "Fear" in 2017, a group of AIAS Fellows with widely different disciplinary backgrounds had taken on the task of organizing this conference, which became a rewarding, multi-disciplinary encounter between researchers from all over the world.

AIAS has just recently celebrated its 5-year anniversary of its official inauguration in June 2013. Much has been achieved in a matter of only five years. The continued development of AIAS is of course still on the agenda, but a certain amount of consolidation of AIAS's own platform will be a necessary prioritization for some time to come too, in relation to both its activities, its governance, and its organization. ■

Morten Kyndrup, Summer 2018

DOING INTERDISCIPLINARITY: A FELLOW'S PERSPECTIVE

By: Isabel Kusche

AIAS-COFUND Fellow, previously Institut für Sozialwissenschaften, University of Osnabrück, Germany

Close to three years in her AIAS fellowship, sociologist Isabel Kusche reflects on the concept of interdisciplinarity. Does it bring forth opportunities or run into obstacles, or is it a value in itself?

Interdisciplinarity is often promoted as facilitating the solution of pressing problems, for which purely disciplinary frameworks are thought to be too narrow. Alternatively, interdisciplinarity is regarded as fostering the communication with lay publics and thus contributing to the accountability of scientific research. Both these understandings seem ill-suited in the context of an institute for advanced study in general and AIAS in particular.

On the one hand, AIAS is open to all research topics and does not even suggest rough thematic areas of research when it sends out its annual call for applications. On the other hand, we fellows are freed from even the most common instruments of accountability. We are not asked to justify our work in terms of publication output or to write a final report about our activities. We do not even have to teach and are therefore not involved in the one relationship of accountability to the wider society that is institutionalized in universities. The intuition when it comes to the interdisciplinary dimension of AIAS seems to be that it opens an additional space for creativity that in the longer run may lead to exciting research that otherwise would not have happened.

Although I am almost at the end of my three-year fellowship, it may be too early to judge "the longer run". But I have certainly experimented with interdisciplinary experiences beyond the regular Fellows' Seminars.

FEAR IN/OF THE INTERDISCIPLINARY MEETING

Last year I co-organized an international interdisciplinary conference on the topic of fear. In the months before the conference my own fear revolved around the fact that, although certainly an interesting and topical thematic focus, 'fear' was not by any means an established or even emerging field of interdisciplinary research. In the organizing team, we had come up with an excit-

ing list of scholars. Each of them worked on research questions related to fear. Nevertheless they focused on wildly different objects, ranging from a specific type of neuron in the amygdala over snails and marmots to people in fear of crime or terrorism. It had been far from easy to group the speakers into interdisciplinary sessions and it did not seem unlikely that the two days would go disastrously wrong. I feared that the discussions would be slow and strained, simply because people would not really know what to say to each other across the many disciplinary boundaries we had chosen to ignore when we put together the program.

Mysteriously it turned out to be quite wonderful and special. Of course, this is just my opinion, and I am easily drawn into presentations that have nothing whatsoever to do with my own research interests. But from the exchanges during the conference I got the distinct impression that people enjoyed themselves and genuinely appreciated the opportunity to learn what was going on outside their disciplines. Interdisciplinarity in this format came down to pure curiosity, before and beyond any specific goal orientation, and I think that this is a good thing. After all, it was probably curiosity that initially brought us into research.

CLASHING IN A GLOBAL SETTING

This March curiosity brought me to Singapore and the Intercontinental Academia (ICA) on "Laws: Rigidity and Dynamics", a ten-day event organized by the institutes for advanced study in Singapore and Birmingham within the UBIAS network, a global network of 44 University-based Institutes for Advanced Study. The ICA gathered mid-career fellows from various disciplines and several continents as well as a number of highly renowned academic mentors. I was challenged every day to find ways to relate to research questions and approaches very different from my own and I enjoyed the diversity of the participants and their views.

But at times the experience was also frustrating. Different expectations regarding interdisciplinarity clashed. The majority



Photo: AIAS Fellow Magnus Kjærgaard at the AIAS Conference: Fear: Brain, Behaviour, Society. By: Lise Balsby.

of fellows tended to prioritize curiosity regarding the disciplinary views of others over working on a specific project. Considering that we had only just met and that there would be a second workshop one year later, this seemed only reasonable to me. But there were also fellows who wanted to specify what we were actually aiming to do as quickly as possible and who demanded a clear focus on a problem.

In a way, their expectation was in line with much of the discourse on interdisciplinarity that is geared towards problem-solving. But if the problem is not pre-defined by a sponsor or an existing organizational framework, the question becomes which problem it is that one may want to solve together.

PROBLEM-DRIVEN OR PURE CURIOSITY?

Does that mean that interdisciplinarity has to be either problem-driven from the start or be limited to a temporary indulgence in pure curiosity? I don't think so. Currently I am working on two separate papers with AIAS fellows from other disciplines, one in a very early stage, the other one hopefully soon ready for submission. I have no idea what their impact will be in the longer run, but three things are for sure: They both started with curiosity about each other's disciplinary perspective. They both focus on problems that took time to identify as interesting and relevant for us. And they both would not be in the making if it were not for AIAS. ■



Photo: Networking in the AIAS Hall during the Fear: Brain, Behaviour, Society conference in December 2017. By: Lise Balsby.

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Interdisciplinarity in this format came down to pure curiosity, before and beyond any specific goal orientation, and I think that this is a good thing. After all, it was probably curiosity that initially brought us into research.

GENE EDITING: A PATH TOWARDS CURING GENETIC DISEASES

By: Rasmus O. Bak,
AIAS-COFUND Fellow & Associate Professor,
Department of Biomedicine
Aarhus University

Rasmus O. Bak's research at AIAS focuses on genetic diseases and aims to develop methods that can one day definitively cure these diseases. Using a technology called CRISPR/Cas9, Rasmus has already demonstrated that it is possible to make precise edits to the human genome. Ongoing research will refine this technology and prepare it to be tested in humans.

More than 6,000 diseases are caused by single errors in the human genetic code. Gene therapy has been pursued for decades where a functional copy of the defective gene is delivered to dysfunctional cells. While this has proven successful for a few genetic diseases, the mechanism that some of these older gene therapy systems use to randomly insert the functional gene into the human genome have caused cancer in several patients.

A MOLECULAR PAIR OF SCISSORS

The first techniques that enable precise modifications to the genome were developed 15 years ago and are based on the discovery that a break in the genome can stimulate a repair mechanism termed 'homologous recombination'. Through homologous recombination, cells can be tricked into repairing genomic breaks by using a researcher-supplied repair template in a copy-paste fashion. The newest gene editing tool termed 'CRISPR/Cas9' consists of the Cas9 enzyme that acts as a molecular pair of scissors that researchers can easily program to cut at exact locations in the genome, and combined with a supplied repair template one can thereby introduce precise edits to the genetic code.

FROM RESEARCHER TO RESEARCH GROUP LEADER

At the same time as commencing my AIAS fellowship, I established my own research group at the Department of Biomedicine at Aarhus University with the generous support from a

Lundbeck Foundation Fellowship. The group consists of three postdocs, one research assistant, and one medical student, and we focus our efforts on developing therapies based on CRISPR/Cas9. For example, we are currently trying to develop methods to perform gene editing directly in a patient instead of having to extract cells from the patient and perform the editing in a culture dish in the laboratory. Related to immunological studies, we have recently shown that we can make genetic changes to blood stem cells and subsequently turn the stem cells into mature effector immune cells. We hope to use this technology to engineer immune cells with enhanced properties in cancer and infectious diseases.

ADVANCED GENETICS – ADVANCED TREATMENTS

AIAS provides a unique research environment with a focus on advancing research excellence through creativity, freedom, interdisciplinarity, and unparalleled institutional support. My research group has established several research collaborations with other fellows at AIAS, e.g. with Asad Jan, PhD, to employ CRISPR/Cas9 in studies of neurodegenerative diseases. We have also established collaborations with several investigators at the Faculty of Health and the Faculty of Science and Technology. Finally, with a team of medical doctors at the Aarhus University Hospital we are applying for funding to bring these gene editing therapies to patients. ■

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We have recently shown that we can make genetic changes to blood stem cells and subsequently turn the stem cells into mature effector immune cells. We hope to use this technology to engineer immune cells with enhanced properties in cancer and infectious diseases.

UNDERSTANDING GREEK TRAGEDY AS A CONTEMPORARY POLITICAL ART FORM

By: Isabelle Torrance, AIAS-COFUND Fellow & Associate Professor, previously Department of Classics, University of Notre Dame, USA

Why does Greek tragedy have such an enduring power and popularity in Irish culture? In her research project at AIAS, Isabelle Torrance focuses on proving the theory that Greek tragedy, as a contemporary art form, is always political, at least for the case study of 20th and 21st century Irish culture.

My project analyzes over forty adaptations, editions, and translations of Greek tragedy produced in the divided island of Ireland from the 1920s until the present day, in both English and Irish languages. The story of Oedipus, for example, which concerns a statesman's search for his true identity, is reworked several times in the 1920s shortly after the creation of the Irish Free State when the nation is reflecting on its own identity.

The myth of the sacrifice of Iphigenia, where a father murders his daughter to advance his career, appears in several adaptations during the economic boom of the Celtic Tiger years which now read as a prophetic political warning against the excesses of materialism. This case was the subject of a peer-reviewed article I published recently, though my goal remains to produce a book on the subject of Greek tragedy and Irish politics.

DEVELOPING EXTENSIVE REFERENCE DATABASE

Since there is such a large amount of data to study and compare, I have been very grateful to receive seed funding from AIAS and from the Dean's Office at Aarhus University's Faculty of Arts to develop a prototype for a reference database recording classical allusions in Irish literature. In the future, I plan to expand the scope of the database to include Irish texts with classical influences from all literary genres dating from the medieval period to the present day. In September this year, I will have the opportunity to present my vision for that future project at an interview for an ERC Consolidator Grant in Brussels.

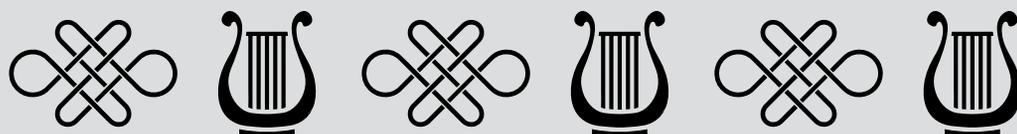
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My goal remains to produce a book on the subject of Greek tragedy and Irish politics



NEXT LEVEL: ERC CONSOLIDATOR GRANT?

My fellowship at AIAS has afforded me the opportunity not only of progressing with my current project, but also of conceiving the next stage of my research career. I have also been able to share the preliminary results of my research through invited lectures at universities including Stanford, Oxford, and of course, Aarhus. My research bridges two fields – Classics and Irish Studies – and I have made fruitful connections with Aarhus University colleagues in both these areas through participating in their seminar series and teaching guest lectures. Currently, I am collaborating with the Director of the Centre for Irish Studies at Aarhus University, Associate Professor Sara Dybris McQuaid, to organize a conference this October on politics and narrative in Ireland's decade of commemorations. And who knows if my research on Greek tragedy will pave the way for a successful ERC grant experience? ■



AN INTERDISCIPLINARY APPROACH FOR WATER RESOURCE MANAGEMENT

By: Naicheng Wu, AIAS-COFUND Fellow,
Guest Professor, Institute of Eastern-Himalaya Biodiversity
Research, Dali University, China

Biodiversity and ecosystem functions – which are extremely important for the delicate balance of nature – are continuously being challenged by multiple stressors such as climate warming, nutrient enrichment, and flow regime change caused by global changes. Understanding how these multiple stressors interfere to impact aquatic organisms and ecosystem functions as well as their driving mechanisms is fundamental to the appropriate management and restoration of freshwater ecosystems. This is exactly what AIAS Fellow Naicheng Wu is seeking to understand in his AIAS research project.

My research applies an interdisciplinary approach to evaluate the relationships between environmental variables and aquatic organisms with a final objective of supporting water management decisions. In particular, my research covers three parts. Firstly, I seek to understand the impacts of multiple stressors on aquatic biodiversity and ecosystem functions. Secondly, I aim at developing a trait-based ecological assessment; and finally I am selecting adaptive strategies for sustainable use of water resources by applying an interdisciplinary approach.

IMPROVING MANAGEMENT STRATEGIES FOR AQUATIC ECOSYSTEMS

During the past 2.5 years' of fellowship at AIAS, I have co-supervised two PhD students together with Dr. Tenna Riis at the Department of Bioscience, Aarhus University, and co-supervised two Master theses. I have published 11 original articles (7 as first

or co-first author, 2 as the last author). In addition, 10 manuscripts have been completed for publication and are either under review or have been submitted. The great environment at AIAS such as the freedom and flexibility as well as the strong support for collaborating with scientists at Aarhus University have greatly contributed to this success. My research has so far provided new insights into the mechanisms of environmental change in stream organisms and ecosystems functions. The coming achievements are expected to forecast future trends with a potential for improving management strategies for aquatic ecosystems.

EXCHANGE OF IDEAS – WITH AARHUS UNIVERSITY AND GLOBALLY

AIAS has provided me with an ideal opportunity to advance my research fast and expand my international collaborations. During my ongoing AIAS project, I am collaborating with Aarhus University researchers Dr. Tenna Riis and Dr. Annette Baatrup-Pedersen for both field experiments and manuscript writings. Furthermore, I have also cooperated with colleagues from China (Prof. Q. Cai), Germany (Prof. N. Fohrer, Prof. B. Schmalz), Poland (Prof. R. Golden) and USA (Prof. Y. Pan). In addition, I have had the opportunity to participate in many international conferences as e.g. The Annual meeting of The Society for Freshwater Science (SFS), International Society of Limnology (SIL), Symposium for European Freshwater Sciences (SEFS), European Geosciences Union (EGU)) where I have contributed with oral or poster presentations. These opportunities have allowed me to exchange ideas with international colleagues and most importantly, they can help me to find potential future cooperation partners. ■



Photo: AIAS Fellow Naicheng Wu and Aarhus University collaborator Ada Pastor Oliveras field sampling at Greenland. By: Louis Skovsholt.

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AIAS-RESEARCH-SELF

By: Joshua Nash, AIAS-COFUND Fellow & Associate Professor, Discipline of Linguistics, University of New England, Australia

Joshua Nash, Australian linguist and AIAS fellow, puts the 'The usefulness of useless knowledge' by Abraham Flexner, the founder of IAS Princeton, to the test at AIAS. Does AIAS live up to the uselessness that Flexner found so useful?

The philosophy and practice of AIAS as a world leading institute-cum-laboratory builds on the guts of Abraham Flexner's seminal 1939 paper 'The usefulness of useless knowledge', namely that "the unobstructed pursuit of useless knowledge will prove to have consequences in the future as in the past." So, an academic playpen with no explicit obligations other than showing up, right? Yes. Well, explicitly yes but implicitly not really. You can talk and participate as much as you want, it's up to you. This is how academic alchemy is conducted at AIAS.

USELESS RESEARCH

How useless is the research carried out at AIAS? On the surface, I spent my first three months analysing recordings I made in 2016 of a language spoken by approximately 30 people on Pitcairn Island, a small Pacific island known the world over for its connection with the Mutiny on the *Bounty*. Can such a small language tell us the 'so much' that we want when we invest 'so much' (money) in such apparently useless research? My answer arose as a question from a wandering intellectual venture: Can art help us understand language as well as linguistics does? Whether or not it can, though I believe it can, AIAS has given me the time-space to examine this possibility.

AN 'ISLAND LANGUAGE'?

AIAS also gave me the opportunity to pose two philosophical questions with no obvious answers: Is there such a thing as an 'island language'? And if so, what is particular to island languages? Eleven scholars contemplated these issues at a round table on a rainy spring afternoon in 2018 at AIAS. We believe this was the first time these questions were ever debated so vividly anywhere in the world. We thought, shared, and pondered. The results are forthcoming. At a deeper level, and more important to me as a researcher-explorer-human, **the quietude of my office, the spontaneous conversations in the corridors, and**



Photo: Joshua Nash by Melissa Booh Yelirm.

the freedom to take inspiration from the artistic and creative environment of AIAS, Aarhus University, and the City of Aarhus led me to plunge into an academic and existential Dark Night of the Soul: Where is my research headed? Is it worth the effort? Where is the human in all this? Again, the results of these experiments are pending. One thing is sure – the aesthetic and scientific landscapes which unfolded out of these light-dark interactions are of great value.

RESEARCH, ART, SCIENCE, UTILITY, CURIOSITY, SELF

AIAS is an appropriate milieu for this medley. Considering free range research and its utility leads me to Flexner's words about Faraday's work on electricity and magnetism: "As far as he cared, the question of utility was never raised. Any suspicion of utility would have restricted his restless curiosity." Flexner wrote of the philosophy of the Princeton IAS on which AIAS is based: "It exists as a paradise for scholars who, like poets and musicians, have won the right to do as they please and who accomplish most when enabled to do so." That sounds useful to me. ■

DOES NEUROTICISM CAUSE DEPRESSION?

By: Søren Dinesen Østergaard, AIAS JCS Fellow, Professor at Dept. of Clinical Medicine, Aarhus University, Denmark & Doug Speed, AIAS-COFUND Fellow, previously UGL Genetics Institute, University College London, UK

AIAS Fellows Søren Dinesen Østergaard and Doug Speed have engaged in a promising collaboration. Søren studies psychiatric diseases and Doug studies genetics – and in their joint project they focus on psychiatric genetics. Specifically, they are aiming to increase our knowledge of the causes underlying depression.

It is a well established fact that the personality trait called 'neuroticism', i.e. a general tendency to feel worried, hurt, lonely and irritable, is associated with an increased risk of developing depression. However, it remains unknown whether this association represents a causal relationship. Is it indeed neuroticism that causes depression? Or is it vice versa? Or is it actually something else, e.g. adverse childhood experiences, that causes both?



Photo: Collaborating fellows: Søren Dinesen Østergaard and Doug Speed in the AIAS Hall. By Lars Kruse.

SEARCHING FOR CAUSALITY

The potential causality of the neuroticism-depression association can be determined by a genetic method called 'Mendelian Randomization'. Previous studies have discovered over 100 genetic factors which influence neuroticism. Using these findings, we can classify individuals based on their genetic predisposition towards neuroticism; i.e. we can divide individuals into those who have inherited a large number of 'neuroticism mutations', and who are therefore more likely to be neurotic, and those who have inherited only a few. If we observe that depression is more common among people genetically predisposed towards neuroticism, then this is evidence that neuroticism causes depression.

THE 'FOURTH FACTOR': AIAS

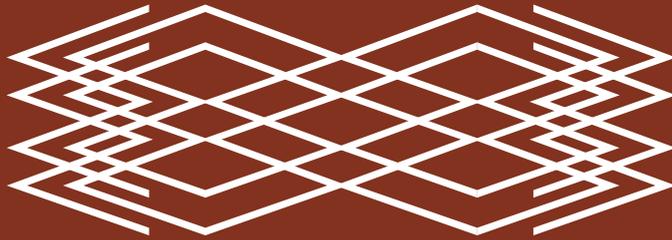
Four factors make this collaboration possible. The first is Søren's knowledge of the nature of mental disorders, which makes him able to generate hypotheses about their etiology. The second is Doug's mathematical and programming skills. He has

previously performed genetic analysis for over 100 traits, and is able to develop the required statistical methods within his software package LDAK. The third factor is the location. Aarhus is home to iPSYCH, the world's largest and most detailed study into psychiatric genetics, which will provide data for this exciting project. The fourth factor is AIAS that brought Søren and Doug to the same place.

'Actually I had already singled out Doug as a potential collaborator even before we met the first day at AIAS. I don't think he knows that – so now he does,' Søren said grinning.

Watch this space to follow the research outcome of this 'random' meeting, but 'causal' combination of specialist knowledge. Results are expected to be published in a peer-reviewed journal in 2019. ■

FELLOWS 2017-2018



In the academic year of 2017-18, **41 fellows** from **34 different research institutions** from around the globe have been conducting their excellent research projects at AIAS. Fellows come from a **diversity of academic research areas** and bring **19 different nationalities** together in one house to **inspire and challenge** each other's project and **generate novel ideas**.


ANDREW NEWBY

AIAS COFUND Fellow

Associate Professor, previously Department of World Cultures, University of Helsinki, Finland

Area of research: History, Humanitarian Studies, European Studies
Project title: 'Charity and Solidarity: Danish Famine Relief to Sweden, Finland and Iceland in the 1860s'

My research project examines the idea of "psychological proximity" as a factor in charitable fundraising, through a case study of the Danish response to three famine relief appeals (in Sweden, Finland and Iceland) in 1867-8. The historical case study links to universal questions of disaster relief and fundraising in the twenty-first century, and particularly the "psychology of giving": (imagined) ethnic and religious affinities; economic, trade, academic and cultural connections; "deserving" and "undeserving" recipients of aid; and tensions between supporting "domestic" and "foreign" causes.


ANJA BECHMANN

Jens Christian Skou Fellow

Associate Professor, Department of Media Studies and Journalism & Research Director AU DATALAB – Center for Digital Social Research, Aarhus University, Denmark

Area of research: Digital Sociology
Project title: 'A Pragmatic Theory of Social AI'

Social AI are machine learning models used to create meaningful predictions and subsequent actions based on social media data and such models are becoming important engines of the data-driven society. Social AI automates what kind of news is being presented to what kind of people and how people are depicted through social data. In my research at AIAS, I have critically analyzed to what extent Social AI is able to create meaningful predictions that are sustainable both to our understanding of the social human being and to society. This has resulted in an interdisciplinary AIAS conference on AI, four research applications, six paper and article submissions and presentations, invited talks, work on a book proposal, co-chairing research ethical guidelines for the community (AoIR) and work in the EU Commission high level group on disinformation.


ANNA NEUHEIMER

AIAS COFUND Fellow

Associate Professor, Department of Oceanography, University of Hawaii at Manoa, USA

Area of research: Marine Ecology
Project title: 'Timing is everything: Developing a mechanistic understanding of fish timing strategies and their role as conduits of climate change (FutureFish)'

Timing is everything in seasonal environments, with a predator's success dependent on how they match their prey in space and time. This is thought to be particularly true for vulnerable early stages of many fish, where limited parental investment means survival depends on how well larvae match food timing (the "Match Mismatch Hypothesis"). With FutureFish, I am developing new tools to (i) estimate how fish timing controls abundance, (ii) estimate the adaptive potential of fish timing, and (iii) predict the influence of timing on future fish production and related ecosystem dynamics.



ANNI KLEINO

AIAS COFUND Fellow

Associate Professor, Department of Medicine, University of Massachusetts Medical School, USA

Area of Research: Molecular biology

Project title: 'The role of functional bacterial amyloids in alpha-synuclein misfolding and aggregation in Parkinson's disease'

I am interested in how interactions of microbiota and the host cells regulate human health. My project focuses on functional bacterial amyloids that the gut microbiota secrete into the gut lumen. These functional amyloids may trigger inflammation in the gut but also promote conversion of alpha-synuclein into amyloid form, and may thus play a role in Parkinson's disease pathogenesis. My aim is to characterize the immune responses elicited by various functional amyloids, analyze whether they promote alpha-synuclein misfolding and aggregation, and test if this could be prevented by amyloid inhibitors.



ARMIN W. GEERTZ

Jens Christian Skou Fellow

Professor, Department of the Study of Religion, Aarhus University, Denmark

Area of research: Religion

Project title: 'A Biocultural Approach to Embodiment, Ritual and Mysticism'

I study religious behavior from the perspective of neuropsychology, cognition and social sciences. Much of my work concerns the role that religious behavior might have had in the evolution of our species. Furthermore, I use digital approaches to historical sources identifying such matters as embodiment, mysticism and ritual practices in the past. My project is an attempt to bring the history of religions into dialogue with the natural and social sciences. A coming book on the evolution of religion and various publications on ecstatic ritual behavior are in the offing.



ASAD JAN

AIAS COFUND Fellow

Postdoc, previously Department of Medicine, University of British Columbia, Canada

Area of research: Neuroscience

Project title: 'Blocking the prion-like disease propagation in Parkinson's disease and related disorders – model development and identification of cell-autonomous and cell non-autonomous factors'

Parkinson disease is a progressive neurodegenerative disease, and the most common neurodegenerative cause of motor disability. My current research focus is developing and validating genome editing tools in models of Parkinson disease, and potentially other neurodegenerative diseases. In particular, I am interested in how changing the genetic makeup of neurons would affect the prion-like behaviour of misfolded alpha synuclein protein, which is implicated in the loss of neurons in brain of Parkinson disease patients. Combined with gene expression datasets, I also want to characterize novel molecular mechanisms that could lead to discovery of novel therapeutic targets.



CHRISTINA KKONA

AIAS COFUND Fellow

Associate Professor, Department of English, Hellenic American University, Greece

Area of research: Cultural Studies

Project title: 'The unexpected: toward a politics and aesthetics of discontinuity'

My project challenges dominant discourses depicting the past and the present in terms of a future proclaimed as determinate: on the one hand, the promissory political narratives of a better world displaced onto a continually differed future; on the other hand, apocalyptic scenarios related to planetary obliteration and climate change. As an alternative, I aim to theorize a politics that would no longer be a future-oriented promise, but a present-oriented action embracing unpredictable events and generating "new beginnings." Engaging with questions of social exclusion, I examine how conscience as openness to the unexpected can reorganize the present as space/time of openness to the other.



CICI ALEXANDER

AIAS COFUND Fellow

Associate Professor, previously Department of Life and Environment Sciences, Bournemouth University, UK

Area of research: Remote Sensing

Project title: 'Innovative remote sensing techniques for developing green infrastructure strategies to support biodiversity conservation and carbon sequestration'

My project at AIAS will use innovative, and complementary, remote sensing techniques for assessing and monitoring green infrastructure. Airborne Laser Scanning, using the technique of Light Detection and Ranging (LiDAR), has advantages over other remote sensing techniques for characterising the three-dimensional structure of vegetation. The main objectives are to develop indices for the quality of urban green networks, methods for the rapid assessment of changes in woody vegetation cover and for the identification of forests of High Nature Value, using multi-spectral imagery in addition to the Danish national LiDAR datasets.



DARIN STEPHANOV

AIAS COFUND Fellow

Postdoc, previously University of Jyväskylä, Finland

Area of research: Comparative Imperial History

Project title: 'Monarchic Visibility, Public Space, and Collective Identities in the Romanov and Ottoman Empires (1825-1908). A Comparative Study of the Finnish and Bulgarian Trajectories of Communal-cum-National Consciousness'

My project traces the origins, nature and evolution of the cycles of symbolic interaction between a cross-section of Finns and Bulgarians (the ruled) and their respective Romanov and Ottoman monarchs (the rulers). The new imperial policies of royal image making, along with the discourses and practices spun around them, unlocked a complex process of extension of long-standing localized micro forms of belonging and their linkage to the center for a new imperial macro form of belonging at the popular level. In short, this signaled the advent of modernity.

**DENNIS KONNERUP**

AIAS COFUND Fellow

Assistant Professor, previously School of Agriculture and Environment, University of Western Australia, Australia

Area of research: Plant Physiology**Project title:** 'Surviving saline floods – salinity and submergence tolerance of wild rice'

Some plants, e.g. rice and floating sweet-grass, possess hydrophobic leaves that retain a thin layer of air when submerged. This air layer is called a gas film, and the aim of my project is to elucidate how this mechanism enhances oxygen and carbon dioxide exchange with the floodwater under different floodwater conditions. In my project, I will use species of wild rice as these possess higher genetic diversity compared to cultivated rice. Submergence experiments will be conducted to assess how the species differ in their ability to retain gas films under water, and studies with micro-electrodes will be used to examine how the internal aeration of the plants depends on the gas film retention time.

**DOROTHEE BIRKE**

AIAS COFUND Fellow

Associate Professor, previously English Department, University of Freiburg, Germany

Area of research: English Studies**Project title:** 'Situating Homelessness on the Contemporary British Stage'

My project examines how contemporary theatre in Britain engages with debates on the housing crisis as one of the great challenges in an era of mass migration and austerity measures. I argue that as a spatial art with a long political tradition, the genre of drama invites audiences to consider questions of social responsibility, but also to confront their own anxieties about economic instability. Considering a corpus of plays from the 1990s to the present day, I am writing the first book-length study on how dramatic texts reflect the highly precarious and contested character of 'home' in today's Britain.

**DOUG SPEED**

AIAS COFUND Fellow

Assistant Professor, previously UGL Genetics Institute, University College London, UK

Area of research: Genetics**Project title:** 'Developing statistical tools to analyze large-scale genetic datasets and improve our understanding of complex diseases'

There is an ever-increasing amount of genetic data available, but we lack tools to efficiently analyze these data; my work focuses on developing the statistical tools we require. One of my focuses is personalized medicine: the high heritability of many human diseases means that in theory it should be possible to accurately predict an individual's risk of disease from their DNA; my novel methods will help make this a reality. I will make my tools freely available to other researchers through my software package LDK (www.ldk.org).



FEDERICA BERTOLOTTI

AIAS COFUND Fellow

Postdoc, previously Department of Science and High Technology, University of Insubria, Italy

Area of research: Solid State (Nano-)Chemistry

Project Title: 'From the atomic structure to the nanocrystal morphology: a novel Unified X-ray Scattering approach for the characterization of nanomaterials'

During the last year of my AIAS fellowship I've worked on the development of integrated modelling of Small and Wide-Angle X-ray scattering data (the first collected with a dedicated instrument at iNANO, the second at SLS/PSI, a large scale facility in Switzerland), using the Debye Scattering Equation. This integration is of particular interest dealing with defective nanomaterials, for which disentangling the size/shape- and defects-induced peaks broadening in the diffraction pattern is not a trivial task. So far, together with my collaborator, I've applied this method on two different classes of nanomaterials (CdSe colloidal QDs and nanoapatite) and the results will be published soon.



FRANTS H. JENSEN

AIAS COFUND Fellow

Postdoc, previously Department of Ecology & Evolutionary Biology, Princeton University, USA

Area of research: Biology

Project title: 'Movement coordination, leadership and collective foraging in matrilineal toothed whales'

Social animals rely on collective actions to solve ecological problems ranging from finding and catching food to avoiding predation. At AIAS, I investigate how highly social animals reach consensus decisions and coordinate movement and activity with other group members. I use sound and movement recording tags attached to small groups of matrilineal pilot whales to quantify coordination and underlying acoustic interactions in situ. This allows me to test how different individuals influence collective decisions and to ultimately understand the behavioral interaction rules shaping collective movement in social animals.



IRYNA MAZHAK

AIAS COFUND Fellow

Associate Professor, National University 'Kyiv Mohyla Academy' Kyiv, Ukraine

Areas of Research: Public Health and Social Sciences

Project Title: 'The Social Determinants of Health and Health Inequalities among Working-age Population in Ukraine'

During my interdisciplinary project at AIAS, I apply an explanatory sequential mixed methods design to reveal and analyze the social determinants of health/health inequalities among working-age Ukrainian population. The theoretical framework of the study is intersectionality. The quantitative phase includes a nationwide survey and secondary analysis of the European Social Survey data. The qualitative phase involves in-depth interviews with people experiencing vulnerability in health and case studies of good policy practices to tackle health inequalities. Also, I address the comparative analysis of health inequalities in Ukraine vis-à-vis EU countries.



ISABEL KUSCHE

AIAS COFUND Fellow

Associate Professor, previously Institut für Sozialwissenschaften, University of Osnabrück, Germany

Area of Research: Political Sociology

Project Title: 'Non-programmatic Politics in Times of Fiscal Crisis'

Against the backdrop of the financial crisis, my project asks how political parties in Spain, Greece, Ireland and Great Britain have reconciled harsh austerity measures with the aim to do well in elections. Results indicate that pre-crisis patterns of non-programmatic politics like constituency service and clientelism were altered to varying degrees, depending on how much they had previously built on resources no longer available and on whether public debate attributed the severity of the crisis to pre-crisis non-programmatic politics



ISABELLE TORRANCE

AIAS COFUND Fellow

Associate Professor, previously Department of Classics, University of Notre Dame, USA

Area of Research: Classical Reception and Irish Studies

Project Title: 'Greek Tragedy and Irish Politics'

My research at AIAS shows how Irish politics are deeply embedded in what may appear to be simple retellings of Greek tragedy over the course of the 20th and 21st centuries. Support from AIAS and from the Dean's Office at the Faculty of Arts has enabled me to develop a database to record and disseminate material related to my project more efficiently. This year, I have also enjoyed developing stronger connections with the research and teaching programmes at AU's Centre for Irish Studies and AU's Department of Classical Studies.



JESSICA L. BARKER

AIAS COFUND Fellow

Postdoc, previously Ecology and Evolutionary Biology, University of Arizona, USA

Area of research: Evolutionary Biology

Project title: 'Inter-group environmental dilemmas: can we scale up from local to global cooperation?'

I study the evolution of cooperative behavior: when and why individuals are willing to benefit others, often at a cost to themselves. There is evidence that people have evolved to favor members of their own group at the expense of people in other groups, but the factors that affect cooperation among multiple groups remain largely unknown. I have continued to work on two manuscripts directly related to this question, the data for which I collected in the previous year (a survey in Southeast Alaska and an experiment in the Cognition and Behavior Lab at AU), and have also obtained seed funding from the AU Interacting Minds Centre to collect data for a project arising from a review paper I wrote in the previous year (Robinson & Barker 2017). I also obtained a seed grant for a study on cooperation and communication, and used it to run an experiment at the Cognition and Behavior Lab (data currently being analyzed).



JESSICA D. WISKUS

AIAS COFUND Fellow

Professor, Department of Musicianship, Duquesne University, USA

Area of research: Music and Philosophy

Project title: 'Rhythmical Ethics (On Music and the Performance of Philosophy)'

My research examines the rhythmical relation between embodied consciousness and world. I use "rhythm" to describe the way that our sense of time-consciousness exceeds what is given in the present (as sensations); it rather coheres with a transcendent past and future. Drawing upon texts of classical phenomenology as well as performances of musical works, my work ultimately aims at articulating an ethics that would be rhythmical – i.e., an ethics based not on the propositions of language but, more deeply, on the phenomenological structures at work in the movement of time-consciousness.



JESSIE FILLERUP

AIAS COFUND Fellow

Associate Professor, Department of Music, University of Richmond, USA

Area of research: Musicology

Project title: 'Enchanted: Music and Conjuring in the Long Nineteenth Century'

My current research focuses on the use of music in nineteenth-century theatrical magic shows performed in Europe and North America. To explore the structural and affective function of music in specific conjuring effects, I analyze the musical styles and genres that accompanied them. I also use these analyses to create new interpretations of conjurer figures in classical ballets and operas, like the character Von Rothbart in Tchaikovsky's Swan Lake. My project combines archival research with hermeneutics, interweaving histories of magic, music, spectacle, and popular entertainment.



JOSHUA NASH

AIAS COFUND Fellow

Associate Professor, Discipline of Linguistics, University of New England, Australia

Area of research: Linguistics

Project title: 'Documenting the highly endangered Pitcairn Island language in New Zealand and Australia'

I began my AIAS project about the Pitcairn Island language in February 2018. A key question, which will now drive my entire fellowship, has arisen out of the individual silence and fruitful collegial association AIAS offers: Can artistic, aesthetic, and creative endeavours help us as much as linguistic science does in our appreciation and understanding of what language is and how it works? Through linguistic analysis of texts, experimental writing, processes of personal journeying and self-discovery, and the medium and enterprise of film, I have arrived at a sturdy work-in-progress answer to my question: Yes. Art is congruous with science as an effective heuristic in appraisals of language.

**KATIE BARCLAY**

EURIAS Fellow

Associate Professor, Department of History, The University of Adelaide, Australia

Area of research: History**Project title:** 'What difference does family make? The family in society, Scotland 1650-1850'

The question at the heart of this project is: Can the family be used as a category of analysis? in much the way that race, gender and class have for humanities and social science scholars. The family is a key site for the transmission of identity and the production of memory, and it plays a significant role in shaping ideas of community and nation. This project explores how 'the family' can be used as a concept to explain social differences and processes of historical change.

**LUÍS PEDRO VIEGAS**

AIAS COFUND Fellow

Assistant Professor, previously Department of Chemistry, University of Coimbra, Portugal

Area of research: Theoretical and Computational Atmospheric Chemistry**Project title:** 'Green design of CFC alternatives: an interdisciplinary approach'

The adverse environmental impact stemming from the release of certain chemical compounds into the atmosphere has led to an international effort (e.g. the United Nations and European Commission) to implement policies tackling this problem. At AIAS, my research focuses on studying degradation pathways of a new and promising class of hydrofluoropolyethers through the use of molecular modelling techniques. I will try to unveil fundamental aspects of their unestablished atmospheric chemistry, hoping to discover new alternatives for the production of new greener compounds through eco-friendly industrial processes.

**MAGNUS KJÆRGAARD**

AIAS COFUND Fellow

Assistant Professor, previously Department of Chemistry, University of Cambridge, UK

Area of research: Molecular Biology**Project title:** 'Can a cooked noodle store information? The mechanisms of disordered proteins in synaptic plasticity'

My AIAS project studies the mechanisms of proteins that contribute to memory formation and consolidation in the brain. Memories are stored in the physical structure of the brain, and particularly in the way neurons communicate with each other in the synapse. My work centers on the receptors that detect signals sent between neurons in the synapse, which we investigate using biophysical tools. The long-term goal is to understand why some experiences are forgotten after five minutes, while others are stored for a life-time.



MICHAEL BANG PETERSEN

Jens Christian Skou Fellow

Professor, Department of Political Science and Government, Aarhus University, Denmark

Area of research: Political science

Project title: 'Political Rumors: Why Do They Spread and How Can They Be Stopped?'

Politics has changed. Citizens once passively received news from a select number of mass media. Today, in the age of the Internet, citizens are actively engaged in disseminating news stories themselves via social media. One consequence of this fundamental change is that rumors, i.e., difficult-to-verify information, abound in politics. This project contributes to our understanding of political rumors by building a general theory of the psychology that motivates people to spread political rumors. Theoretically, the project combines the insights from biology, psychology and the social sciences.



MICHAEL VOLDSGAARD CLAUSEN

AIAS COFUND Fellow

Assistant Professor, previously Department of Physics, University of Oxford, UK

Area of research: Biophysics

Project title: 'How do we sense touch, sound, balance and force?'

Many forms of sensory perception in higher organisms depend upon the rapid conversion of mechanical and physical stimuli into the electrochemical language of nerve and muscle cells. These transduction mechanisms often involve mechanosensitive ion channels that are able to convert physico-mechanical responses into the electrical signals required for the control of complex physiological responses e.g. touch, pain, hearing and proprioception. The goal of my project is to decipher the exact molecular mechanisms that underlie this translation of physical force into ion-channel gating.



NAICHENG WU

AIAS COFUND Fellow

Guest Professor, Institute of Eastern-Himalaya Biodiversity Research, Dali University, China

Area of research: Hydroecology

Project title: 'Developing a risk assessment system to evaluate the impacts of future land use and climate scenarios on aquatic ecosystems - an interdisciplinary model-based synthesis'

Biodiversity and ecosystem functions – which are extremely important to the delicate balance of nature – is being continuously challenged by multiple stressors such as climate warming, nutrient enrichment, and flow regime change induced by global changes. My research at AIAS is using an interdisciplinary model-based synthesis to explore the human mediated impacts on river ecosystems and develop sustainable strategies for aquatic ecosystems under rapid global change. The study will address three major topics: risk assessment, management scenarios and integrated ecohydrological modelling.



NIKOLAJ T. ZINNER

Jens Christian Skou Fellow

Associate Professor, Department of Physics and Astronomy, Aarhus University, Denmark

Area of research: Physics

Project title: 'Quantum few-body networks with superconducting circuits'

My research goal in this project is to produce a prototype of a fully quantum mechanical network that can perform non-trivial quantum tasks. It hinges on a new class of quantum spin transistor that my collaborators and I are now working closely with experimentalists to realize. Building on these ideas, I want to take the next step of building a quantum network that can classify or manipulate quantum information in an autonomous manner, and provide a blueprint for how this can be realized in superconducting quantum circuits.



PARASKEVI MANOLAKI

AIAS COFUND Fellow

Postdoc, previously Environmental Conservation and Management, Open University of Cyprus

Area of research: Stream Ecology

Project title: 'Effects of global changes on river ecosystem functioning: Understanding underlying mechanisms of multiple stressors using aquatic plant traits'

Most of the global changes in rivers occur as multiple interacting stressors and lead to a chain of effects on the ecosystem structure and functioning. My AIAS project studies how aquatic plants respond through their biological traits to multiple stressors, and seeks to determine how response traits affect stream functioning. My project follows the scaling approach from individual to ecosystem dynamics through the community level, and tests 1) how a community response to a change and 2) how a changed community affects the ecosystem process. I am currently working on mesocosm experiments using the experimental field facilities at Aarhus University.



PETER TEGLBERG MADSEN

Jens Christian Skou Fellow

Professor, Department of Bioscience, Aarhus University, Denmark

Area of research: Sensory physiology

Project title: 'Adaptive perception through active sensing'

I am interested in how wild animals use sensory systems to inform behavioral transitions to find food, avoid predators and navigate. I am particularly interested in understanding how echolocating animals actively sense with sound to form a very adaptive perception of their environment. To do that, I am using small archival, acoustic tags on wild animals from bats to sperm whales allowing me to study their sensory ecology as a function of natural and disturbed habitats.


RASMUS O. BAK

AIAS COFUND Fellow

Associate Professor, previously Stanford University, USA

Area of research: Biomedicine
Project title: 'Precise CRISPR-mediated genomic integration of large transgenes in human cells'

My research project focuses on editing the genome of human cells. Numerous genetic diseases are caused by an error in a single gene. Using the newly developed CRISPR/Cas9 system, we hope to be able to correct these disease-causing mutations and cure the patients definitively. This project addresses the challenge when patients suffering from the same disease display different mutations scattered within that gene. To make a universal gene editing cure that would apply to all patients, one would need to integrate the whole functional gene into the genome. For large genes, this poses a unique technical challenge that we hope to overcome.


SAMUEL MCCORMICK

EURIAS Fellow

Associate Professor, Department of Communication Studies, San Francisco State University, USA

Area of research: Communication Studies
Project title: 'The Chattering Mind: A Conceptual History of Everyday Talk'

In this book project, I consider the unexplored European tradition of philosophical commentary on the communicative practices of mass society, especially insofar as this commentary can be shown to inform ongoing discussions of collective life in the digital age. In particular, "The Chattering Mind" traces the conceptual history of ordinary conversation as it stretches from Søren Kierkegaard's inaugural theory of "chatter" (snak) to Martin Heidegger's resurgent account of "idle talk" (Gerede) to Jacques Lacan's culminating treatment of "empty speech" (parole vide)—and ultimately into our digital present, where "small talk" has become the basis for "big data".


SHUBIAO WU

AIAS COFUND Fellow

Associate Professor, Department of Agricultural Engineering, China Agricultural University, China

Area of research: Environmental science
Project title: 'Intensified Constructed Wetlands for Treatment of Ammonia Stripped Effluent: Nitrogen Transformations and Removal Pathways'

My work at AIAS is to investigate the treatment performance and nitrogen removal mechanism of highly alkaline ammonia-stripped digestate effluent in horizontal subsurface flow constructed wetlands (CW). Nitrogen removal performance will be comparatively evaluated in CWs coupled with different intensified configurations, i.e. aeration and effluent recirculation. Nitrogen transformation dynamics and removal pathways will also be discussed by using N-isotopic fractionation assessment and microbial community response.



SØREN DINESEN ØSTERGAARD

Jens Christian Skou Fellow

Professor, Department of Clinical Medicine, Aarhus University, Denmark

Area of research: Psychiatry

Project title: 'Translational studies of mental disorders'

Mental disorders are complex and their etiology is largely unknown. Therefore, treatment remains suboptimal and the prognosis of many mental disorders is poor. There is, however, considerable agreement in the field that these challenges may be overcome by translational psychiatric research, i.e. studies that cover the full pathway from discovery in the lab, bench to bedside, bedside to clinical applications, and from clinical applications to healthcare and global health. During my time at AIAS, I am researching mental disorders based on studies of genes, animals, humans and the entire Danish population.



THOMAS TRAM

AIAS COFUND Fellow

Postdoc, previously Institute of Cosmology and Gravitation, University of Portsmouth, UK

Area of research: Cosmology

Project title: 'Neutrino simulations under the spell of General Relativity'

As a theoretical cosmologist I test the fundamental physical laws governing our Universe by comparing theoretical models to observations. The parameter space is multidimensional so inference relies on Monte Carlo methods. This necessitates fast model computations while the increasing fidelity of the data calls for high accuracy. My research at AIAS focuses on developing methods for including massive neutrinos and General Relativity in numerical simulations of structure formation.



TOBIAS WANG

Jens Christian Skou Fellow

Professor, Department of Bioscience, Aarhus University, Denmark

Area of research: Zoophysiology

Project title: 'Evolution of the four-chambered heart'

How did the four-chambered heart in both mammals and birds evolve independently from a three-chambered heart in their common ancestors amongst early reptiles? From a teleological point of view, this parallel evolutionary transition is consistent with a rise in metabolism associated with the evolution of endothermy – the ability to maintain high and stable body temperatures – in both mammals and birds. However, it is not given that birds and mammals would solve the functional challenge of elevating oxygen transport by evolving so similar cardiovascular structures. Therefore, I am interested in elucidating whether there are evolutionary constraints in the ancestral reptilian heart and whether there were merely a few possible avenues to provide the high blood pressure and high heart rates to provide the extra oxygen transport to the body.


TOMASZ K. WOJDACZ

AIAS COFUND Fellow

Associate Professor, previously Institute of Environmental Medicine, Karolinska Institutet, Sweden

Area of research: Translational Epigenetics
Project title: 'Novel methylation biomarkers for breast cancer clinical management'

More than 200 cell types are building the human body and containing identical DNA but performing different functions. In general, epigenetic research investigates molecular mechanisms that enable the generation of a vast number of cell types from identical DNA. Clinical epigenetics on the contrary focuses on how disruption of epigenetic mechanisms leads to deregulation of cell function and disease. In my work, I focus on epigenetic changes involved in the development of breast cancer and hematological disorders.


TOMONORI TAKEUCHI

AIAS COFUND Fellow

Associate Professor, Biomedical Sciences, University of Edinburgh, UK

Area of research: Neuroscience
Project title: 'Enhancing everyday memory with novelty'

Most of our everyday memories are forgotten. However, the retention of these trivial memories is enhanced when something novel happens shortly before or after the time of memory encoding. This research project aims to address two specific issues: (1) Which brain area detects novelty and how its signal reaches the brain area called locus coeruleus? (2) Which proteins play crucial roles in novelty-induced memory enhancement in the hippocampus? Identification of proteins that enhance memory retention will have the potential to reveal new drug targets for treatment or restoration of lost memory function. These expected outcomes may also lead to development of efficient teaching methods.


ÜMIT AKBEY

AIAS COFUND Fellow

Assistant Professor, previously Leibniz Institute für Molekulare Pharmakologie Berlin, Germany

Area of research: Structural Biology
Project title: 'Fighting Bacterial Infections by Targeting Key Proteins'

Most bacteria form biofilms to survive under stress-inducing conditions and resistant to antimicrobial agents and host immune system. Insoluble proteins in the form of fibrils and molecular assemblies are the most crucial components supplying the structural integrity, so the antimicrobial resistance-infection. However, very little structural information is known on biofilms and their amyloid proteins. We aim to understanding the structural features as an important step towards the development of successful therapeutics for infectious bacteria protected in robust biofilms. The primary goal of my project is to determine the first atomic-resolution structures by using advanced Nuclear Magnetic Resonance spectroscopy. The results obtained from my research will be of great importance for understanding and treating functional amyloid related diseases caused by bacterial biofilms. As a result, clever design and optimization of anti-biofilm drugs targeting fibrils can be achieved.

**XUHUI DONG**

AIAS COFUND Fellow

Associate Professor, previously Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences, China

Area of research: Environmental Change and Geography**Project title:** 'Quantitative assessment on ecological changes and the contribution from climate in remote Greenland lakes: a multidisciplinary study'

My research is using multidisciplinary methods (biological and isotope signals) to quantitatively track environmental change across various spatiotemporal scales based on Greenland lake sediments. For a global implication, the research findings in this project will serve for comparison purpose with other aquatic ecosystems (i.e. strong human impacted Yangtze shallow lakes in China) to understand different ecological trajectories and mechanism of environmental changes. Currently some data on ^{18}O isotope and taxonomy has been produced, along with wider application of paleolimnology in understanding complex systems (i.e. ecosystem service and resilience). Several papers based on existing data are in preparing or have been published.

**YONGHUI ZENG**

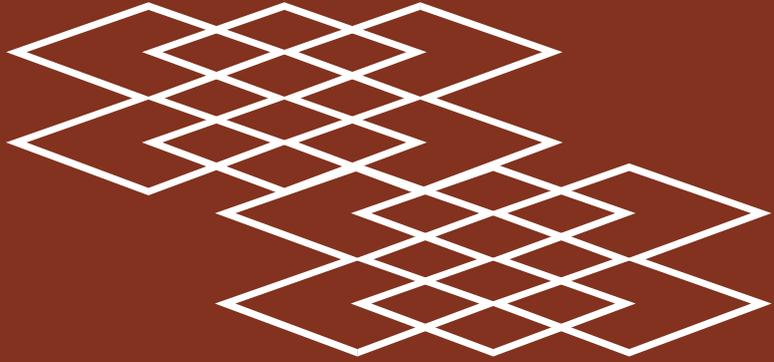
AIAS COFUND Fellow

Associate Professor, previously Department of Phototrophic Microorganisms, Institute of Microbiology, Academy of Sciences, Czech Republic

Area of Research: Environmental Microbiology**Project title:** 'Ecological Genomics of Phototrophic Gemmatimonadetes Bacteria in Diverse Environments'

Photosynthesis was recently found on a new branch of bacterial tree of lives – Gemmatimonadetes. However, very little is known about phototrophic Gemmatimonadetes bacteria (PGB) and what kind of insights it can provide regarding how and why bacteria in nature share the function of photosynthesis. With this AIAS project, I have assembled a sensitive infrared imaging system, which can easily identify bacteria containing the photosynthetic pigment – bacteriochlorophyll. I am excited to see many novel photosynthetic bacteria have been isolated from various natural environments. Currently I am looking at their genome composition and trying to answer the question of what kind of heterotrophic bacteria have the potential to become photosynthetic.

FELLOWS' PUBLICATIONS AND ACTIVITIES



FELLOWS' PUBLICATIONS AND ACTIVITIES

PUBLICATIONS: BOOKS, BOOK CHAPTER

Armin W. Geertz is author of the book chapter 'The Beautiful Butterfly: On the History of and Prospects for the Cognitive Science of Religion' in: *Religion Explained? The Cognitive Science of Religion after Twenty-Five Years* edited by Luther H. Martin et al. London and New York: Bloomsbury Academic, 2017.

Armin W. Geertz is co-author of the book *The Emergence and Evolution of Religion: By Means of Natural Selection*. New York and London: Routledge, 2017.

Jessica D. Wiskus's book *The Rhythm of Thought: Art, Literature, and Music after Merleau-Ponty*. Chicago: The University of Chicago Press (hardcover 2013; paperback 2015) was translated into Chinese. 杰西卡·维思库斯(著)·陈蕾(译). 哲学的启迪. 黑龙江出版社&黑龙江教育出版社. 2017. 哈尔滨.

Lotte Philipson and **Rikke Schmidt Kjærsgaard** edited the book *The Aesthetics of data representation: More than Pretty Pictures*. New York: Routledge, 2017.

Bjørn Panyella Pedersen is co-author of the book chapter 'Visualizing the Bacterium *Streptococcus pneumoniae*' in *The Aesthetics of data representation: More than Pretty Pictures* edited by L. Philipson and R. Schmidt Kjærsgaard. New York: Routledge, 2017.

Djuke Veldhuis is author of the book chapter 'Scientific Storytelling: Visualizing for Public Audiences' in *The Aesthetics of data representation: More than Pretty Pictures* edited by L. Philipson and R. Schmidt Kjærsgaard. New York: Routledge, 2017.

Morten Kyndrup is author of the book chapter "'Facts" – and Representational Acts' in *The Aesthetics of data representation: More than Pretty Pictures* edited by L. Philipson and R. Schmidt Kjærsgaard. New York: Routledge, 2017.

Btihaj Ajana is editor of the book *Self-Tracking: Empirical and Philosophical Investigations* and is author of the chapters 'Introduction' and 'Communal Self-Tracking: Data Philanthropy, Solidarity and Privacy'. New York: Routledge, 2017.

Dorothee Birke is co-author of the book chapter 'Multimodal You: Playing with Direct Address in Contemporary Narrative Television' in: *How to Do Things with Narrative. Cognitive and Diachronic Perspectives* edited by Jan Alber et al. De Gruyter, 2017.

Andrew G. Newby is author of the book chapter "'The Same Thing Could Happen in Finland": The Anti-Imperial Moment in Ireland and Finland, 1916-1917' in 1916 in *Global Context. An anti-Imperial moment* edited by Enrico Del Iago et al. New York: Routledge, 2017.

Alfonso Blázquez-Castro is co-author of the book *Fluorescence Microscopy in Life Sciences*. United Arab Emirates: Bentham Science Publishers, 2017.

Isabelle Torrance is author of the book chapter 'Euripides: *Iphigenia among the Taurians 1029*' in *Line of Enquiry: Favourite Lines from Classical Literature* edited by Paul Corcoran. Dublin: 2017.

Jessica D. Wiskus is author of the book chapter 'Time as Chiasm: Listening for Ideality through Sibelius' in *Chiasmatic Encounters: Art, Ethics, Politics* edited by Kuisma Korhonen et al. Lanham, MD: Lexington Books, 2018.

Joshua Nash is the co-author of the book chapter 'Diachronic fetishisation: Ruin porn and Pitcairn Island language, archaeology, and architecture' in *Ruin Porn: Developing perspectives* edited by Siobhan Lyon. Palgrave, 2018.

Armin W. Geertz is author of the article 'Det religiøse menneskedyr' in *Evolutionspsykologisk grundbog* edited by H. Høgh-Olesen. Harvard: Plurafutura Publishing, 2018.

Christian Ulrik Andersen is co-author of the book *The Metainterface. The Art of Platforms, Cities, and Clouds*. Cambridge, MA: MIT Press, 2018.

Dorothee Birke is author of the book chapter 'Fictions of Personal Memory: The Precarious Character of Remembering and Identity in Kazuo Ishiguro's *When We Were Orphans* (2000), Penelope Lively's *The Photograph* (2003) and Julian Barnes's *The Sense of an Ending* (2011)' in *The British Novel in the Twenty-First Century: Cultural Concerns – Literary Developments – Model Interpretations* edited by Vera Nuenning/Ansgar Nuenning. Trier: WVT, 2018.

Joshua Nash is the author of the book chapter 'Minority contact languages, small islands and linguistic ecology' in *Handbook on Minority Communities and Languages* edited by Gabrielle Hogan-Bruun and Bernadette O'Rourke, 2018.

Jürgen Elvert is author of the book *Europa, das Meer und die Welt – Eine maritime Geschichte der Neuzeit*. Munich: Random House, 2018.

PUBLICATIONS: JOURNAL ARTICLES

Alexander Panayotov is author of the article 'Professions of Jews in the Roman and Early Byzantine Balkans,' in: Popov, H. and Tzvetkova, J. (eds.), *KRATISTOS. Volume in honour of Professor Peter Delev*, Sofia: Sofia University Press, 2017.

Yonghui Zeng is co-author of the article 'Elstera cyanobacteriorum sp. nov., a novel bacterium isolated from cyanobacterial aggregates in a eutrophic lake' in: *International Journal of Systematic and Evolutionary Microbiology*, 21 September 2017.

Morten Kyndrup is author of the article 'Dødsfald: En gribende beretning' in: *Standart*. 31, 2, 2017.

Take T. Høye and **Rane Willerslev** and co-authors published the article 'Legacies of Historical Human Activities in Arctic Woody Plant Dynamics' in: *Annual Review of Environment and Resources*, October 2017.

Nikolaj T. Zinner is co-author of the article 'Quantum simulation of Abelian lattice gauge theories via state-dependent hopping' in: *Physical Review A*, 96, 13 October 2017.

Isabel Kusche is author of the article 'Reflection on Political Representation: Constituency Service as Topic in Irish and British Parliamentary Debates' in: *Comparative Sociology*, 16(5), October 2017.

Yonghui Zeng is co-author of the article 'Draft genome sequence of Elstera cyanobacteriorum, a novel facultative aerobic bacterium isolated from cyanobacterial aggregates in a eutrophic lake' in: *Gene Reports*, Volume 9, 27 October 2017.

Tomasz K. Wojdacz is co-author of the article 'Combining genetic and epigenetic parameters of the serotonin transporter gene in obsessive-compulsive disorder' in: *Journal of Psychiatric Research*, Volume 96, November 2017.

Søren D. Østergaard is co-author of the article 'Face and predictive validity of the Clock Δ 19 mouse as an animal model for bipolar disorder: a systematic review' in: *Molecular Psychiatry*, November 2017.

Magnus Kjærsgaard is co-author of the article 'Dynamics of P-type ATPase transport revealed by single-molecule FRET' in: *Nature* (2017), 8 November 2017.

Andrew G. Newby is co-author of the article 'Select Document: John Hampden Jackson, 'Finland and Ireland: assorted comparisons' (1937)' in: *Irish Historical Studies*, Vol 41, Issue 160, November 2017.

Andrew G. Newby is author of the article '"Black spots on the map of Europe": Ireland and Finland as oppressed nationalities, c. 1860-1910' in: *Irish Historical Studies*, Vol 41, Issue 160, November 2017.

Andrew G. Newby is co-author of the article 'Introduction: Ireland and Finland, 1860-1930: comparative and transnational histories' in: *Irish Historical Studies*, Vol 41, Issue 160, November 2017.

Isabel Kusche is author of the article 'The Accusation of Clientelism: On the Interplay between Social Science, Mass Media and Politics in the Critique of Irish Democracy' in: *Historical Social Research*, Vol 42, No 3, 2017.

Naicheng Wu is co-author of the article 'Riverine phytoplankton shifting along a lentic-lotic continuum under hydrological, physiochemical conditions and species dispersal' in: *Science of The Total Environment*, 2017.

Naicheng Wu is co-author of the article 'Global trends in phytoplankton research of river ecosystems during 1991-2016: a bibliometric analysis' in: *Fundamental and Applied Limnology*, November 2017.

Shubiao Wu is co-author of the article 'Liquid digestate recycled utilization in anaerobic digestion of pig manure: Effect on methane production, system stability and heavy metal mobilization' in: *Energy*, Vol 141, December 2017.

Yonghui Zeng is co-author of the article 'High-quality draft genome sequence of Aquidulcibacter paucihalophilus TH1-2 T isolated from cyanobacterial aggregates in a eutrophic lake' in: *Standards in Genomic Sciences* 12, No 1: 69, 2017.

Armin W. Geertz is co-author of the article 'Spiders and Insects in Hopi Indian Mythology and Religion: A Preliminary Study' in: *Shamanhood and Mythology: Archaic Techniques of Ecstasy and Current Techniques of Research. In Honour of Mihály Hoppál. Celebrating his 75th Birthday*. Budapest: Hungarian Association for the Academic Study of Religions, 2017.

Søren D. Østergaard is co-author of the article 'Bridging the Measurement Gap between Research and Clinical Care in Schizophrenia' in: *Innovations in Clinical Neuroscience*, December 2017.

Yonghui Zeng is co-author of the article 'Niveispirillum lacus sp. nov., isolated from cyanobacterial aggregates in a eutrophic lake' in: *International Journal of Systematic and Evolutionary Microbiology*, 14 December 2017.

Naicheng Wu is co-author of the article 'Seasonal and spatial variations of microcystins in Poyang Lake, China' in: *Environmental Science and Pollution Research*, 15 December 2017.

Tomasz K. Wojdacz is co-author of the article 'A pilot investigation on DNA methylation modifications associated with complex posttraumatic symptoms in elderly traumatized in childhood' in: *BMC Res Notes*, 19 December 2017.

Katie Barclay is author of the article 'Emotion and Change' in: *Emotions: History, Culture, Society* 1(2), 2018.

Cici Alexander is first-author of the article 'Influence of micro-topography and crown characteristics on tree height estimations in tropical forests based on LiDAR canopy height models' in: *International Journal of Applied Earth Observation and Geoinformation*, January 2018.

Magnus Kjærsgaard is co-author of the article 'Hsp70 Inhibits the Nucleation and Elongation of Tau and Sequesters Tau Aggregates with High Affinity' in: *ACS Chem. Biol.* 4 January 2018.

Morten Kyndrup is author of the article 'Et rigtig dårligt forhold: Voluminøs roman af Pablo Llambias' in: *Standart.* 31, 3/4. January 2018.

Morten Kyndrup is author of the article 'Aesthetics and Judgment: "Why Kant got it right"' in: *Nordic Journal of Aesthetics.* 26, 54. 12 January 2018.

Yonghui Zeng is co-author of the article 'Sandarakinorhabdus cyanobacterium sp. nov., a novel bacterium isolated from cyanobacterial aggregates in a eutrophic lake' in: *International Journal of Systematic and Evolutionary Microbiology.* 15 January 2018.

Dennis Konnerup is co-author of the article 'Waterlogging tolerance, tissue nitrogen and oxygen transport in the forage legume *Melilotus siculus*: a comparison of nodulated and nitrate-fed plants' in: *Annals of Botany.* 17 January 2018.

Isabel Kusche is author of the article 'Struktur als Generalisierung – Systemtheorie und Konventionen der Rechtfertigung im Zusammenhang mit digitalem Filesharing' in: *Soziale Welt* 68(2/3): 301-318, 2018.

Rasmus O. Bak is first-author of the article 'CRISPR/Cas9 genome editing in human hematopoietic stem cells' in: *Nature Protocols.* 13 358–376, 25 January 2018.

Morten Kyndrup is author of the article 'Poesiens distance: Nya udspil fra Lone Munksgaard Nielsen og Annemette Kure Andersen' in: *Standart.* Vol. 31, 3/4, January 2018.

Anja Bechmann is co-author of the article 'Are We Exposed to the Same "News" in the News Feed? An Empirical Analysis of Filter Bubbles as Information Similarity for Danish Facebook Users' in: *Digital Journalism.* 2018.

Machteld Verzijden and Ronald Fischer are co-authors of the article 'Dopamine genes are linked to Extraversion and Neuroticism personality traits, but only in demanding climates' in: *Nature Scientific Reports* 8, 29 January 2018.

Rebecca Simmons is co-author of the article 'Effect of screening for type 2 diabetes on healthcare costs: a register-based study among 139,075 individuals diagnosed with diabetes in Denmark between 2001 and 2009' in: *Diabetologia.* 5 February 2018.

Federica Bertolotti is co-author of the article 'Ligand-induced symmetry breaking, size and morphology in colloidal lead sulfide QDs: from classic to thiourea precursors' in: *Chem2.* 6 February 2018.

Peter Teglbjerg Madsen is co-author of the article 'High rates of vessel noise disrupt foraging in wild harbour porpoises (*Phocoena phocoena*)' in: *Proceedings in the Royal Society B.* 14 February 2018.

Søren D. Østergaard is first-author of the article 'The Validity and Sensitivity of PANSS-6 in the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Study' in: *Schizophr Bull.* 15 February 2018.

Katie Barclay is author of the article 'Marriage Regulation in Historical Perspective' in: *Australian Policy & History.* 16 February 2018.

Anja Bechmann is co-author of the article 'Research Findings and Policy Recommendations for Stakeholders and Policy Makers Tackling Information Disorder' in: *COMPACT – Social Media and Convergence.* February 2018.

Rima Obeid is co-author of the article 'Probiotics Affect One-Carbon Metabolites and Catecholamines in a Genetic Rat Model of Depression' in: *Molecular Nutrition & Food Research.* 17 February 2018.

Tobias Wang is co-author of the article 'Komparativ fysiologi: Hjertet og kredsløbet' in: *Kaskelot* #219, February 2018.

Federica Bertolotti is co-author of the article 'A comprehensive structural and microstructural investigation of a new iron-telluride nano phase' in: *Journal of Materials Chemistry C.* 21 February 2018.

Yonghui Zeng is co-author of the article 'Flavobacterium cyanobacterium sp. nov., isolated from cyanobacterial aggregates in a eutrophic lake' in: *International Journal of Systematic and Evolutionary Microbiology.* 27 February 2018.

Katie Barclay is author of the article 'Producing 'Cruel' Welfare Systems in Historical Perspective' in: *History & Policy.* 28 February 2018.

Armin W. Geertz is author of the article 'Hvorfor, hvorfra (og hvornår) kom religion?' in: *Religionsvidenskabeligt Tidsskrift.* 31 February 2018.

Anna B. Neuheimer is co-author of the article 'How Life History Characteristics and Environmental Forcing Shape Settlement Success of Coral Reef Fishes' in: *Frontiers in Marine Science.* 1 March 2018.

Søren D. Østergaard is co-author of the article 'Patterns and predictors of conversion to bipolar disorder in 91 587 individuals diagnosed with unipolar depression' in: *Acta Psychiatrica Scandinavica.* 2 March 2018.

Søren D. Østergaard is co-author of the article 'Clinical validation of the Psychotic Depression Assessment Scale (PDAS) against independent global severity ratings in older adults' in: *Acta Neuropsychiatrica.* 4 March 2018.

Shubiao Wu is co-author of the article 'The intensified constructed wetlands are promising for treatment of ammonia stripped effluent: Nitrogen transformations and removal pathways' in: *Environmental Pollution*, Vol 236, 7 March 2018.

Anja Bechmann is co-author of the article 'A Multi-dimensional Approach to Disinformation: Report of the independent high level group on fake news and online disinformation' in: *Bruxelles: EU Commission*, 12 March 2018.

Dennis Konnerup is first-author of the article 'Waterlogging tolerance, tissue nitrogen and oxygen transport in the forage legume *Melilotus siculus*: a comparison of nodulated and nitrate-fed plants' in: *Annals of Botany*, Volume 121, Issue 4, 14 March 2018.

Frants H. Jensen is co-author on the article 'Challenges and Solutions for studying Collective Animal Behavior in the Wild', in: *the Philosophical Transactions of the Royal Society B*, March 26, 2018.

Jessica L. Barker is first-author of the article 'Learning about larceny: experience can bias bumble bees to rob nectar' in: *Behavioral Ecology and Sociobiology*, 29 March 2018.

Rasmus O. Bak is co-author of the article 'Time-Restricted PiggyBac DNA Transposition by Transposase Protein Delivery Using Lentivirus-Derived Nanoparticles' in: *Molecular Therapy Nucleic Acids*, Vol 11, 29 March 2018.

Michael Bang Petersen is co-author of the article 'The Behavioral Immune System is Designed to Avoid Infected Individuals, Not Outgroups' in: *Evolution and Human Behavior*, Volume 39(2), March 2018.

Søren Dinesen Østergaard is author of the article 'Increasing Male Preponderance in Suicide Coinciding With a Reduction by Half in Total Suicides in the Danish Population Should Raise Awareness of Male Depression' in: *The American Journal of Psychiatry*, Volume 175, Issue 4, 1 April 2018.

Shubiao Wu is co-author of the article 'Nutrient recovery from anaerobically digested chicken slurry via struvite: Performance optimization and interactions with heavy metals and pathogens' in: *Science of the Total Environment*, Vol 635, 9 April 2018.

Isabelle Torrance is author of the article 'Greek Tragedy and the Celtic Tiger: The Politics of Literary Allusion in Marina Carr's *Ariel*' in: *Arion: A Journal of Humanities and the Classics at Boston University*, 25, 2018.

Toke T. Høye is co-author of the article 'Differential arthropod responses to warming are altering the structure of Arctic communities' in: *Royal Society Open Science*, 18 April 2018.

Anja Kamp is co-author of the article 'A confocal microscopy based method to monitor extracellular pH in fungal biofilms' in: *FEMS Yeast Research*, Volume 18, Issue 5, 19 April 2018.

Peter T. Madsen and Frants H. Jensen co-authored the article 'Echolocation click source parameters of Australian snubfin dolphins (*Orcaella heinsohni*)' in: *Journal of the Acoustical Society of America*, April 2018.

Isabelle Torrance is author of the book review 'The Reception of Aeschylus' in: *Classical Review* 68, April 2018.

Peter Teglbjerg Madsen is author of the article 'Memories' in: *Marine Mammal Science*, 34(2), April 2018.

Anja Bechmann is co-author of the article 'Facebook shuts the gate after the horse has bolted, and hurts real research in the process' in: *Internet Policy Review*. 25 April 2018.

Rasmus O. Bak is co-author of the article 'Priming Human Repopulating Hematopoietic Stem and Progenitor Cells for Cas9/sgRNA Gene Targeting' in: *Molecular Therapy - Nucleic Acids*, 3 May 2018.

Federica Bertolotti is co-author of the article 'Exploration of Near Infrared-Emissive Colloidal Multinary Lead Halide Perovskite Nanocrystals using an Automated Microfluidic Platform' in: *ACS Nano*, 12 May 2018.

Yonghui Zeng is co-author of the article 'Common presence of aerobic anoxygenic photosynthesis within the genus *Limnohabitans*' in: *Applied and Environmental Microbiology*, Volume 84(1), 2018.

Katie Barclay is co-editor of the journal 'Emotions: History, Culture, Society', issues 1, no. 2 (2017) and 2, no. 1 (2018).

Michael Bang Petersen is co-author of the article 'Partisan Goals, Emotions, and Political Mobilization: The Role of Motivated Reasoning in Pressuring Others to Vote' in: *Journal of Politics*, 2018.

Michael Bang Petersen is author of the article 'Reproductive Interests and Dimensions of Political Ideology' in: *Evolution and Human Behavior*, Volume 39(2), 2018.

Michael Bang Petersen is author of the article 'Falske nyheders magt: Hvorfor tror vi på dem, hvorfor spredt vi dem' in: *Økonomi & Politik*, Volume 91(1), 2018.

Shubiao Wu is co-author of the article 'Phosphate removal from aqueous solution using iron oxides: Adsorption, desorption and regeneration characteristics' in: *Journal of Colloid and Interface Science*, Vol 528, 24 May 2018.

Morten Kyndrup is author of the article 'Finsk finurlighed: En historie fra det virkelige liv' in: *Standart*, 32, May 2018.

Morten Kyndrup is author of the article "'Jeg er fugl, ikke ornitolog": Kirsten Hammann letter smukt, men landingen fortaber sig' in: *Standart*, 32, May 2018.

Joshua Nash is author of the book review 'Hawley (2015), A Storm of Songs: India and the Idea of the Bhakti Movement' in: *International Journal of Hindu Studies*, Volume 22(2), 2018.

Cici Alexander is first-author of the article 'Locating emergent trees in a tropical rainforest using data from an Unmanned Aerial Vehicle (UAV)' in: *International Journal of Applied Earth Observation and Geoinformation*, Vol. 72, June 2018.

Frants H. Jensen co-authored the article 'Bottlenose dolphins retain individual vocal labels in multi-level alliances' in: *Current Biology*, 7 June 2018.

Peter Teglbjerg Madsen is author of the article 'The evolution of foraging capacity and gigantism in cetaceans' in: *Journal of Experimental Biology*, 221, 12 June 2018.

Rasmus O. Bak is first-author of the article 'Gene Editing on Center Stage' in: *Trends in Genetics*, 13 June 2018.

Anja Kamp is first-author of the article 'Intracellular nitrate in sediments of an oxygen-deficient marine basin is linked to pelagic diatoms' in: *FEMS Microbiology Ecology*, 19 June 2018.

Naicheng Wu is co-author of the article 'Relationship of land-use pattern and physiochemical conditions and phytoplankton communities in a German lowland catchment' in: *Fundamental and Applied Limnology*, Vol. 191, June 2018.

Michael Bang Petersen is co-author of the article 'Upper-Body Strength and Political Egalitarianism: Twelve Conceptual Replications' in: *Political Psychology*, 2018.

Amy M. Iler is co-author of the article 'Experimental warming in the field delays phenology and reduces body mass, fat content and survival: Implications for the persistence of a pollinator under climate change' in: *Functional Ecology*, 16, 1206-12, 27 June 2018.

Frants H. Jensen and Peter T. Madsen are co-authors of the article 'Click communication in wild harbour porpoises (*Phocoena phocoena*)' in: *Scientific Reports*, 28 June 2018.

Magnus Kjærgaard is first-author of the article 'Oligomer diversity during the aggregation of the repeat-region of tau' in: *ACS Chemical Neuroscience*, 28 June 2018.

Rasmus O. Bak is co-author of the article 'Global transcriptional response to CRISPR/Cas9-AAV6 based genome editing in CD34+ Hematopoietic Stem and Progenitor Cells' in: *Molecular Therapy*, 2 July 2018.

Asad Jan is first-author of the article 'Activity of translation regulator eukaryotic elongation factor-2 kinase is increased in Parkinson disease brain and its inhibition reduces alpha synuclein toxicity' in: *Acta Neuropathologica Communications*, 6:54, 2 July 2018.

Cici Alexander is first-author of the article 'LiDAR patch metrics for object-based clustering of forest types in a tropical rainforest' in: *International Journal of Applied Earth Observation and Geoinformation*, Volume 73, 2 July 2018.

Naicheng Wu is co-author of the article 'Effects of hydrological variables on structuring morphological trait (cell size) of diatom community in a lowland river' in: *Ecological Indicators*, Vol. 94, July 2018.

Joe L. Scarpaci is co-author of the article 'Artists as cultural icons: the icon myth transfer effect as a heuristic for cultural branding' in: *Journal of Product & Brand Management*, Vol. 27 Issue: 3, 6 July 2018.

Dennis Konnerup is co-author of the article 'Physiology, gene expression, and metabolome of two wheat cultivars with contrasting submergence tolerance' in: *Plant, Cell & Environment*, Vol 47, Issue 7, July 2018.

Federica Bertolotti is first-author of the article 'When Crystals go Nano. The Role of Advanced X-ray Total Scattering Methods in Nanotechnology' in: *European Journal of Inorganic Chemistry*, 10 July 2018.

Frants H. Jensen is co-author of the article 'Modelling tissue and blood kinetics in coastal and offshore common bottlenose dolphins, *Tursiops truncatus*' in: *Frontiers in Physiology*, 17 July 2018.

Frants H. Jensen is co-author of the article 'Resting metabolic rate and lung function in wild offshore common bottlenose dolphins, *Tursiops truncatus*, near Bermuda' in: *Frontiers in Physiology*, 17 July 2018.

Frants H. Jensen is co-author of the article 'Heaviside's dolphins relax acoustic crypsis to increase communication range' in: *Proceedings of the Royal Society B: Biological Sciences*, 18 July 2018.

Isabelle Torrance is author of the review 'C. W. Marshall: Aeschylus' in: *Sehepunkte*, 18 July 2018.

Joshua Nash is the author of the article 'Linguistic spatial violence: The case of the Muslim cameleers in the Australian outback' in: *Refract*, 1(1), 2018.

Shubiao Wu is co-author of the article 'Effect of flocculation pre-treatment on membrane nutrient recovery of digested chicken slurry: Mitigating suspended solids and retaining nutrients' in: *Chemical Engineering Journal*, Vol 352, 20 July 2018.

Peter T. Madsen is co-author of the article 'Variability of the inter-pulse interval in sperm whale clicks with implications for size estimation and individual identification' in: *J. Acoust. Soc. Am.*, 26 July 2018.

Rasmus O. Bak is co-author of the article 'A high-fidelity Cas9 mutant delivered as a ribonucleoprotein complex enables efficient gene editing in human hematopoietic stem and progenitor cells' in: *Nature Medicine*, 6 August 2018.

EXTERNAL ACADEMIC ACTIVITIES

Consuelo Manetta presented the paper 'Architecture and Decoration from the Propylon of Seuthopolis' at the 13th International Conference of *Trachology. Ancient Thrace: Myth and Reality*, 3-7 September 2017, Kazanluk, Bulgaria.

Luis P. Viegas gave the invited talk 'Computational Green Chemistry: behind principle #10' at the MACC17 conference, University of Coimbra, 6 September 2017, Coimbra, Portugal.

Armin W. Geertz gave the talk 'Communicating Religion' entitled 'Teresa of Ávila: A Neuropsychological Approach' at the conference the European Association for the Study of Religions (EASR), 18 September 2017, Leuven, Belgium.

Iryna Mazhak gave an invited research seminar 'Gender, Social and Behavioral Inequalities in Subjective and Objective Self-Reported Health' at the Speaker Series of the UAB Department of Sociology, University of Alabama, 20 September 2017, Birmingham, US.

Dorothee Birke presented the paper 'Economies of Space: The Value of Home in Contemporary British Theatre' at the annual convention of the German Association for English Studies, 21-22 September 2017, University of Regensburg, Germany.

Darin Stephanov gave the paper 'Ruler Visibility, the Invention of 'Dynasty', and Modern Belonging in the Late Russian and Ottoman Empires. Comparative, Trans-Imperial, and Global Historical Dimensions' at conference *The Modern Invention of 'Dynasty': A Global Intellectual History, 1500-2000*, Birmingham Research Institute for History and Cultures, 21-23 September 2017, University of Birmingham, UK.

Consuelo Manetta organized the AIAS Workshop Cultic Connections in the North Aegean Region and gave the talk 'The Sanctuary of the Great Gods in Seuthopolis, Thrace, in the Light of New Evidence', 22 September 2017, AIAS, Denmark.

Anja Bechmann organized the AOIR Ethics Committee Seminar, AU Datalab, 6 October 2017, Aarhus University, Denmark.

Iryna Mazhak taught the course 'Medical Sociology', Ukrainian Catholic University, 17-24 October 2017, Lviv, Ukraine.

Katie Barclay presented the invited paper 'Emotion, Lower Order Scots and Connected Communities, 1660-1830' at the Guelph Scottish Studies Seminar Series, 18 October 2018, University of Guelph, Canada.

Anja Bechmann co-organized the Internet Ethics Workshop on big data at AOIR, 18-21 October 2017, Tartu, Estonia.

Anja Bechmann presented the papers 'The Algorithmic Gaze: Predicting Uploader's Gender Based on Private Social Media Images', 'AI Biases' and 'The Invisible Shaping of Public Discourse in Online Spaces: Algorithms' at the annual conference AOIR 2017 Networked Publics, 19-21 October 2017, Tartu, Estonia.

Katie Barclay gave the invited paper 'Marriage, Emotion and the Scottish Court System in the Long Eighteenth Century' at the conference 'Law and Governance in Britain', 20-21 October 2017, University of Western Ontario, London, Canada.

Armin W. Geertz gave a talk for secondary school students on 'From Apes to Popes: A Study of Religion Narrative' (Fra abe til pave: En religionsvidenskabelig beretning) in connection with the university-wide "Studiepraktikanterne", 26 October 2017, Aarhus, Denmark.

Shubiao Wu gave the invited lecture 'How Can Intensified Constructed Wetlands Be Promising for Treatment of Ammonia Stripped Effluent with High Buffering Capacity of Alkalinity: Nitrogen Transformations and Removal Pathways' at the Dept. of Bioscience, Aquatic biology section, 26 October 2017, Aarhus University, Denmark.

Tomasz K. Wojdacz gave the talk 'Clinical Importance of DNA methylation Signatures in Chronic Lymphocytic Leukaemia Patients Treated with Chemo-immunotherapy' at the Australian Epigenetic Alliance conference, 30 October 2017, Brisbane, Australia.

Xuhui Dong gave a keynote presentation 'Lake sediment and environmental change: a paleoecological perspective' at the 6th meeting of the Chinese Society of Sedimentology and chaired one session 'Lake sediment and environmental change', 27 October - 3 November 2017, Nanjing University, China.

Shubiao Wu gave the invited lecture 'Agricultural Bio-waste Treatment and Value-added Utilization Buffering' at the Dept. of Agroecology, 6 November 2017, Aarhus University, Denmark.

Xuhui Dong gave the presentation 'Reference conditions for shallow lake restoration: evidence from sediment records' at the 5th National Meeting on Sedimentology and Environment, 7-10 November 2017 Qingdao, China.

Jessica Wiskus gave the invited talk 'Music and Empathy: Some Insights from Phenomenological Research' at the Department of Musicology, 9 November 2017, Aarhus University, Denmark.

Armin W. Geertz gave the talk 'The Emergence and Evolution of Religion: By Means of Natural Selection' at the *Evolution of Religion II* conference, 14 November 2017, Santa Ana, New Mexico, US.

Katie Barclay gave the paper 'The Interdisciplinary World of the History of Emotion' at the workshop 'Interdisciplinary Research in Social Sciences and Public Health', 14 November 2017, Aarhus Institute for Advanced Studies, Denmark.

Yonghui Zeng gave the talk 'Evolutionary Genomics of Photoheterotrophs living in Arctic Ecosystems' at the Arctic Research Center Annual Meeting 2017, 16 November 2017, Aarhus, Denmark.

Luis P. Viegas gave the talk 'Computational strategies in finding greener CFC replacements' at the 'Simpósio Brasileiro de Química Teórica' (Brazilian Symposium of Theoretical Chemistry), 16 November 2017, Águas de Lindóia, Brazil.

Xuhui Dong gave the presentation 'What roles lake sediment can play? A response to the national call on ecological protection' at the 2017 National Meeting on Physical Geography, 19 -22 November 2017, Nanjing, China.

Anja Bechmann co-organized the seminar 'GDPR in Businesses & Digital Research Dilemmas', Digital Society & ATV, 21 November 2017, AIAS, Denmark.

Katie Barclay gave the paper 'Travelling for Work: Marriage and Mobility in eighteenth and early nineteenth-century Scotland' at The annual Finnish gender studies conference *Genders through time*, 23-25 November 2017, University of Jyväskylä, Finland.

Anja Bechmann gave the paper 'Keeping it Real: From Faces and Features to Social Values in Deep Learning Algorithms on Social Media Images' at the *Proceedings Annual Hawaii International Conference on System Sciences (HICSS)*, 2017.

Katie Barclay presented the invited paper 'Can the Family Be a Category of Analysis?' at Aarhus University Department of History Seminar Series, 29 November 2017, Aarhus, Denmark.

Dorothee Birke gave the invited talk 'Close to Home: Documentary and Autobiographical Elements in Contemporary British Plays about the Housing Crisis' at the PhD working group 'Cultural Production Dynamics', 29 November 2017, University of Salzburg, Austria.

Tomasz K. Wojdacz and collaborators gave the talk 'Clinical Importance of DNA Methylation Signatures in Chronic Lymphocytic Leukemia Patients Treated with Chemo-Immunotherapy' at the 59th Annual meeting and Exhibition of the American Society of Haematology, 9-12 December, Atlanta, Georgia, US.

Christina Kkona gave the talk 'The Unexpected: the hope beyond all hopes' at the Human Futures' Annual meeting, 12-13 December 2018, Aarhus University, Denmark.

Xuhui Dong gave the presentation 'Ecological Regime Shifts and Changes of Lake Ecosystem Service in a Shallow Yangtze Lake Over the Past 150 Years' at the 2017 American Geophysical Union Fall Meeting (AGU 2017), 11-15 December 2017, New Orleans, US.

Anni Kleino gave the invited talk 'Experiences of working with an EMBO long-term fellowship' at the Biocenter Finland Career Workshop, 14-15 December 2017, Helsinki, Finland.

Katie Barclay was co-organizer of the symposium 'The Emotional Worlds of Children and Young People', 14-15 December 2017, University of Adelaide, Australia.

Yonghui Zeng visited the State Key Laboratory of Marine Geology of Tongji University to work on a collaborative project 'Identification of Novel Photosynthetic Bacteria in coastal East China Sea', 18-30 December 2017, Shanghai, China.

Isabel Kusche gave the talk 'Erosion und Restabilisierung politischer Macht in der Staatsschuldenkrise: Spanien und Irland im Vergleich' at the Research Colloquium on Sociological Theory, 10 January 2018, Leuphana University, Lüneburg, Germany.

Isabel Kusche gave the talk 'Griechische Statistiken. Zur Beobachtung von Fakten in der Finanzkrise' at the public outreach event '10 Minuten Soziologie', 11 January 2018, Leuphana University, Germany.

Thomas Tram gave the talk 'Præcisionskosmologi: mere end tankespind' at Astronomers' Day for primary and secondary school teachers, 12 January 2018, Aarhus University, Denmark.

Thomas Tram gave the talk 'Mørk energi' at Folkeuniversitetet, 22 January 2018, Copenhagen, Denmark.

Doug Speed taught the course 'Statistics for Interpreting Genetic Data', on 11, 18 and 25 January 2018, University College London, UK.

Andrew G. Newby curated the historical exhibition 'Nälkä! The Great Finnish Famine', Strokestown Park Museum, 26 January 2018, Ireland.

Thomas Tram gave the talk 'Mørk energi' at Folkeuniversitetet, 29 January 2018, Aarhus, Denmark.

Yonghui Zeng presented the poster 'Searching for Novel Photosynthetic Bacteria in High Arctic' at the '2nd Workshop on Field Studies' at the Villum Research Station (VRS), 30 January 2018, Roskilde, Denmark.

Rasmus O. Bak gave the talk 'Precise Genome Editing of Hematopoietic Stem Cells' at the Dept. of Haematology, Aarhus University Hospital, 31 January 2018, Aarhus, Denmark.

Isabel Kusche gave the talk 'Observing Pathologies: Conditionality Instruments and the Greek State in the Euro Crisis' at a Conference on Institutional Pathologies, 1 February 2018, University of Witten, Germany.

Anja Bechmann was an invited delegate and presenter at the Social Science Foo Camp at Facebook, 2-4 February 2018, San Francisco, USA.

Rasmus O. Bak gave the talk 'CRISPR - DNA-saksen der bekæmper arvelige sygdomme' at Folkeuniversitet, 6 February 2018, Aarhus, Denmark.

Rasmus O. Bak gave the talk 'CRISPR - DNA-saksen der bekæmper arvelige sygdomme' at Folkeuniversitet, Campus Empdrup, 8 February 2018, Empdrup, Denmark.

Tomonori Takeuchi gave the invited talk 'Dopaminergic memory enhancement by two distinct novelty systems' at The BRI International Symposium 2018, 10-11 February 2018, Niigata University, Japan.

Tomonori Takeuchi gave the invited talk 'Dopamine-dependent memory boosting by two distinct novelty systems', February 2018, at the National Institute for Basic Biology, Aichi, Japan.

Peter Teglbjerg Madsen gave the Candlemass talk 'Hvalforskning på dybt vand', 11 February 2018, Sandbjerg Estate, Aarhus University, Denmark.

Dorothee Birke taught the seminar 'Reflections on Digital Culture in Contemporary Literature, Film and TV' at the University of Freiburg, 15-16 February 2018, Freiburg, Germany.

Tobias Wang gave a talk on 'Genetics and Evolution' at Folkeuniversitet, 19 February 2018, Campus Empdrup, Denmark.

Andrew G. Newby gave the invited talk 'Charitable Donations to Disaster Victims: Case Studies from Nineteenth-Century Scandinavia', 19 February 2018, Manchester University's Humanitarian and Conflict Response Institute, UK.

Magnus Kjærgaard gave the talk 'Disordered protein linkers: Predicting effective concentrations using polymer physics' at The Biophysical Society Meeting, 20 February 2018, San Francisco, US.

Tomasz K. Wojdacz gave the talk 'Epigenetic biomarkers: from discovery to clinical use', 21 February 2018, Matopolskie Centrum Biotechnologii, Jagiellonian University, Poland.

Anna B. Neuheimer gave the invited guest lecture 'Marine Ecology' at the Department of Bioscience, February 2018, Aarhus University, Denmark.

Jessica L. Barker gave the talk 'The limits of parochial altruism: insights from evolutionary biology for promoting inter-group cooperation', 21 February 2018, University of Groningen, the Netherlands.

Jessica L. Barker gave the talk 'Inter-group cooperation in an environmental dilemma', 22 February 2018, Wageningen University, the Netherlands.

Søren D. Østergaard gave four talks entitled 'The Mortality Rate of Electroconvulsive Therapy (ECT): Results From a Systematic Review and Pooled Analysis'; 'Teenage parenthood and birth rates for individuals with and without ADHD'; 'Patterns and predictors of conversion to bipolar disorder in 91,587 individuals diagnosed with unipolar depression'; and 'The validity and sensitivity of PANSS-6 in treatment-resistant schizophrenia' at the World Psychiatric Association Thematic Meeting, 25-28 February 2018, Melbourne, Australia.

Tobias Wang gave the talk 'Kroppens opbygning og funktioner' at Folkeuniversitet, 26 February 2018 Aarhus, Denmark.

Jessica D. Wiskus gave the talk 'On Memory, Nostalgia, and the Temporal Expression of Music' at the Art and Phenomenology Symposium, 5 March 2018, National University of Ireland, Galway, Ireland.

Katie Barclay gave the invited guest lecture 'Family, Memory, and Identity in Historical Perspective' at the Institute for Advanced Social Research, 6 March 2018, University of Tampere, Finland.

Rasmus O. Bak gave the talk 'Gene Editing by Synthetic and Chemically Modified sgRNAs' at the PhD course Genome Engineering, 6 March 2018, Graduate School of Health, Aarhus University, Denmark.

Andrew G. Newby gave the talk 'Brothers from the Nordic Tribe: Scandinavia, Finland and Famine Relief, 1857-70' and chaired two sessions at the s, 7-9 March 2018, University of Helsinki, Finland.

Michael Bang Petersen gave the invited talk 'Naturvidenskabelige Årsager - Humanistiske Effekter' at The Danish Royal Academy of Sciences and Letters, 8 March 2018, Denmark.

Jessie Fillerup gave the paper 'Musical Temporality and Theatrical Magic Shows' at the Nineteenth Century Time Symposium, 10 March 2018, University of Toronto, Canada.

Peter Teglbjerg Madsen gave the talk 'Menneskedyret homo sapiens' at the Public Lectures in Natural Sciences, 13 March 2018, Aarhus University, Denmark.

Michael Bang Petersen gave the invited talk 'The Design of the Political Mind' at the Central European University, 14 March 2018, Budapest, Hungary.

Andrew G. Newby organized in collaboration with Nina J. Kofoed the LUMEN symposium 'Religion and Social Welfare. Lutheranism and Societal Development', 19 March 2018, AIAS, Denmark.

Doug Speed taught the course 'Statistical Genetics Short Course – Methods for analysing complex trait GWAS data' on 22 March 2018, AIAS, Denmark.

Doug Speed gave the talk 'Better estimation of SNP heritability from summary statistics' at the North England Statistical Epidemiology Group, 28 March 2018, UK.

Christina Kkona gave the talk 'The Unexpected as a remedy to the crisis of predictability' at the ACLA Annual Meeting, 29 March - 1 April 2018, UCLA, US.

Katie Barclay presented the paper 'Loneliness and Community in Early Modern Scotland'; & Discussant on 'Religion and the Body in the North of Europe, c.1400–1700', and on 'Mixed marriages, binational and interracial couples and divorce from a comparative perspective' at the European Social Science History Conference, 4-7 April 2018, Belfast, Ireland.

Michael Bang Petersen gave the presentation 'Fake News and the Psychology of Conflict: How Zero-Sum Mindsets Shape Beliefs in and Exposure to "Fake News" in Eastern Europe' at the Annual meeting of the Midwest Political Science Association, 5-8 April 2018, Chicago, US.

Michael Bang Petersen was co-organizer of the conference 'Mind and Democracy in the Age of Social Media' sponsored by the Danish Ministry of Higher Education and Science and hosted by the Royal Danish Academy of Sciences and Letters, 16 April 2018, Denmark.

Michael Bang Petersen gave the invited talk 'Some Men Just Want to Watch the World Burn!' on the Psychological Allure of Fake News at The Danish Royal Academy of Sciences and Letters, 16 April 2018, Denmark.

Dorothee Birke gave the talk 'Narratorial Mediation or Narratorial Presence? Rethinking 'Diegetic Narrativity' in Drama', at the Annual Convention of the International Society for the Study of Narrative, 22 April 2018, Montreal, Canada.

Federica Bertolotti gave the invited talk 'The Debye Scattering Equation: a Total Scattering approach for characterizing nanomaterials' at the Total Scattering Symposium, 25 April 2018, University of Copenhagen, Denmark.

Joshua Nash gave the talk 'Preposition Trauma' at Forsknings Døgn, National Research Festival, 26 April 2018, Aarhus University, Denmark.

Anna B. Neuheimer gave the talk 'Timing is everything: Why fish do what they do when they do it' at Forsknings Døgn, National Research Festival, 26 April 2018, Aarhus University, Denmark.

Isabel Kusche presented the paper 'Parteienwettbewerb in der (Finanz-) Krise: Irland, Griechenland und Spanien im Vergleich' at the Meeting of the Political Sociology Section of the German Sociological Association, 27 April 2018, Bamberg University, Germany.

Søren Dinesen Østergaard was chairman of the session 'Reward and punishment' at the 'Neuroscience Day 2018 – Rewarding Neuroscience', 1 May 2018, Aarhus University, Denmark.

Isabelle Torrance gave the talk 'Sophocles' Antigone and her Brother: Case Studies' at the Research Seminar on Classical Antiquity and its Heritage, 2 May 2018, Department of Classics, Aarhus University, Denmark.

Darin Stephanov conducted a research trip to the Turkish Prime Ministry's Ottoman Archives in Istanbul, 3-17 May 2018, Istanbul, Turkey.

Anja Bechmann gave a talk at the workshop 'The Next Generation Internet: Building an Internet for Humans' at the Internet Week Denmark, 4 May 2018, Aarhus, Denmark.

Søren Dinesen Østergaard gave the talk 'Is ECT dangerous?' at the Annual Meeting of the International Society of ECT and Neurostimulation, 5 May 2018, New York, US.

Søren Dinesen Østergaard gave the talk 'Is the Clock Δ19 mouse a valid model for bipolar disorder?' at the Annual Meeting of the Society of Biological Psychiatry, 11 May 2018, New York, US.

Dorothee Birke gave the invited presentation 'Reading as a Social Activity in the 21st Century' at the conference Modes of Reading, at the School of Communication and Culture, 14-15 May 2018, Aarhus University, Denmark.

Katie Barclay presented the invited paper 'Teenage Love: Independent Emotions and the Scottish Lower Orders' at the History Seminar Series, 15 May 2018, University of Southern Denmark, Denmark.

Naicheng Wu gave the talk 'Watershed ecology and Ecological Civilization' at the 1st International Youth Scholar Forum, 15-17 May, Nanchang, China.

Anna B. Neuheimer gave the invited guest lecture 'Statistical modelling' May 2018, at the Department of Bioscience, Aarhus University, Denmark.

Rasmus O. Bak gave the invited talk 'CRISPR-medieret gen-korrektion i hæmatopoietiske stamceller. [CRISPR-mediated gene correction in hematopoietic stem cells]' at the Department of Hematology, Aarhus University Hospital, 16 May 2018.

Katie Barclay was co-organizer of the symposium 'Family, Memory, Identity' at Aarhus Institute of Advanced Studies, 23-24 May, Aarhus, Denmark.

Michael Bang Petersen organized the workshop 'Why Do We Care? On the Deep Origins of Solidarity' at the Matchpoints Conference, 24-26 May 2018, Aarhus University, Denmark.

Katie Barclay gave the invited talk 'What is an Irish Emotion? Emotions in the production of nations' at the Emotions & Irish History Symposium, University of Sheffield, 29 May 2018, UK.

Anja Bechmann was an invited keynote at *Trust in Media Communication*, 29 May - 3 June 2018, University of Münster, Germany.

Luís Pedro Viegas gave the talk 'Reactivity of hydrofluoropolyethers towards OH: a cost-effective implementation of multiconformer transition state theory' at the 13th National Meeting of Physical-Chemistry/2nd Symposium of Computational Chemistry, 4-6 June 2018, Faro, Portugal.

Dorothee Birke gave the talk 'Houses of Horror: Addressing the Anxieties of the Housing Crisis' at the conference *Fear and Anxiety in Contemporary Drama*, German Society for Contemporary Drama in English, 31 May - 3 June 2018, University of Hildesheim, Germany.

Katie Barclay presented the paper 'Thinking romantically in the eighteenth-century Scottish community' at the History of Emotions Conference, George Mason University, 1-2 June 2018, Virginia, US.

Luís Pedro Viegas gave the talk 'Reactivity of hydrofluoropolyethers towards OH: a cost-effective implementation of multiconformer transition state theory' at 13th National Meeting of Physical-Chemistry/2nd Symposium of Computational Chemistry, 4-6 June 2018, Faro, Portugal.

Federica Bertolotti was invited to give the course 'The Debye Scattering Equation: a Total Scattering approach for characterizing Nanomaterials' at the Crystallography Summer School 2018 organised by Interdepartmental Center for Crystallography, 8 June 2018, University of Torino, Italy.

Doug Speed gave a course and a presentation at GeneForum 2018, 10-12 June 2018, Tartu, Estonia.

Federica Bertolotti organized the AIAS Workshop 'Nanomat@AU: Front methodologies and advances in nanomaterials characterization', 13 June 2018, AIAS, Denmark.

Katie Barclay gave the keynote presentation 'Precarious Emotions: Quantification, Big Data and the History of Emotions' at the conference *The Future of Emotions: Conversations without Borders*, Third ARC Centre of Excellence in the History of Emotions, University of Western Australia, 14-16 June 2018, Australia.

Dorothee Birke gave the invited talk 'Doris Lessing', lecture series *Nobelpreisträgerinnen: 14 Schriftstellerinnen im Porträt*, 19 June 2018, Freie Universität Berlin, Germany.

Isabelle Torrance gave the paper 'The Postcolonial Politics of Greek Tragedy in Irish' at the American Conference for Irish Studies, 19 June 2018, University College Cork, Ireland.

Naicheng Wu gave the talk 'Flow regimes filter species traits of benthic diatom communities and modify the ecosystem functions of lowland streams - a nationwide scale study' at the Annual Meeting of The Society for Freshwater Science, 20-24 June 2018, Detroit, US.

Dorothee Birke and **Isabel Kusche** presented the poster 'Digitized Self-Recordings: A Socio-Narratological Mapping' at the conference *Autobiographical Memory and the Self*, 20-21 June 2018, Department of Psychology and Behavioural Sciences, Aarhus University, Denmark.

Andrew Newby curated and launched the Great Finnish Famine exhibition 'Näikää!' in Galway, Ireland, in collaboration with History at National University of Ireland Galway, the Academy of Finland and Aarhus Institute of Advanced Studies, 21 June 2018, Aarhus, Denmark.

Iryna Mazhak gave the paper 'Socio-Economic Inequalities in Self-Reported Health in Ten Eastern European Countries' at the Sixth Annual Conference of the Leibniz Institute for East and Southeast European Studies, 'Social Policy in East and Southeast Europe in the Past and the Present', 21-23 June 2018, Regensburg, Germany.

Federica Bertolotti gave the talk 'DebUsSy 2.0: A powerful tool for characterizing structure, microstructure and morphology of nanomaterials through the Debye Scattering Equation' at the annual meeting of the Italian crystallographic association, Rome, Italy, 26 June 2018.

Katie Barclay gave the keynote presentation 'Happiness in the Family in Nineteenth-Century Ireland' at the conference 'Happiness and Nineteenth-Century Ireland', Society for the Study of Nineteenth-Century Ireland, 28-29 June 2018, Trinity College, Dublin, Ireland.

Joshua Nash conducted fieldwork with Pitcairn Islanders and Pitcairn language speakers, July 2018, Melbourne, Australia.

Luis Pedro Viegas gave the talk 'Reactivity of the atmospherically important hydrofluoropolyethers towards OH: a cost-effective implementation of multiconformer transition state theory' at the 24th IUPAC International Conference on Physical Organic Chemistry, 1-6 July 2018, Faro, Portugal.

Federica Bertolotti gave the talk 'Planar defects and dynamic disorder in lead halide perovskite nanocrystals unveiled through reciprocal space total scattering methods', at the European Powder diffraction conference in Edinburgh, 2 July 2018.

Magnus Kjærgaard presented the poster 'Disordered protein linkers: Predicting effective concentrations using polymer physics' at the Gordon Research Conference on 'Intrinsically Disordered Proteins', 2 July 2018, Les Diablerets, Switzerland.

Shubiao Wu gave the talk 'Development and Validation of a Simplified Nordmann Titration Method for Monitoring Volatile Fatty Acids in Anaerobic Digestion Processes' at 7th International Conference on Engineering for Waste and Biomass Valorisation, 2-5 July 2018, Prague, Czech Republic.

Darin Stephanov gave the presentation 'Scaling Belonging: Reflections on Sociocultural Modernization in the Russian and Ottoman Empires' at the 2018 Australian Historical Association (AHA) conference 'The Scale of History', 2-6 July 2017, Australian National University, Canberra, Australia.

Isabel Kusche gave the paper 'Big Data in Wahlkampagnen. Zu Veränderungen im Verhältnis von Politikern und Wählern' at the workshop 'Maschinen (in) der Kommunikation', 6 July 2018, Technical University of Cottbus-Senftenberg, Germany.

Joshua Nash conducted fieldwork with Pitcairn Islanders and Pitcairn language speakers, July 2018, Melbourne, Australia.

Andrew G. Newby was invited to give commentaries on two papers relating to Italian famine relief for Ireland in the 1840s at the workshop 'The Moral Economy of Global Civil Societies', 10 July 2018, Dept. of Political Science, Università Roma Tre, Italy.

Isabelle Torrance gave the paper 'Democratizing Classics in 20th Century Ireland' at the Celtic Classics Conference, 13 July 2018, University of St. Andrew's, Scotland.

Luis Pedro Viegas presented the poster 'Reactivity of hydrofluoropolyethers towards OH: a cost-effective implementation of multiconformer transition state theory', at the 11th Congress on Electronic Structure Principles and Applications (ESPA-2018), 17-19 July 2018, Toledo, Spain.

Darin Stephanov conducted a research field trip to the Bulgarian National Library and various archives in Sofia to collect new primary sources in connection to his multiple ongoing research projects, 17-31 July 2018.

Anja Bechmann was invited speaker for the plenary panel at 9th international conference on Social Media & Society, Copenhagen, 21 July 2018.

Luis Pedro Viegas presented the poster 'Reactivity of hydrofluoropolyethers towards OH: a cost-effective implementation of multiconformer transition state theory', at the 25th International Symposium on Gas Kinetics and Related Phenomena (GK2018), 22-26 July 2018, Lille, France.

Luis Pedro Viegas gave the talk 'Reactivity of hydrofluoropolyethers towards OH: a cost-effective implementation of multiconformer transition state theory', at the 256th ACS National Meeting & Exposition, 19-23 August 2018, Boston, US.

AWARDS, APPOINTMENTS AND GRANTS

Bjørn Panyella Pedersen has received a grant of DKK 1.5 million by the Novo Nordisk Foundation to examine new ways to regulate sugar uptake across cellular membranes in the human body for the project 'Controlling catabolism at the door: Regulation of the main sugar importers in humans', September 2017.

Jessica L. Barker has received a seed grant of DKK 24,000 from the Interacting Minds Centre (Aarhus University) for the research project 'Signals and social incentives', September 2017.

Rasmus O. Bak has received the 'Young Investigator Award 2017' by The European Society of Gene and Cell Therapy, at ESGCT's 25th Annual Congress in Berlin, Germany, 20 October 2017.

Rasmus O. Bak has received together with Søren Degn, the Dept. of Biomedicine, Aarhus University, a grant of DKK 50,000 from the memorial trust of Max Wørzner and wife Inger Wørzner (Mindelegat) to support cancer research. The grant is awarded for ddPCR-system equipment, 2 November 2017.

Andrew G. Newby's book *Éire na Rúise [The Ireland of Russia]* was listed as one of the Irish books of the year 2017 by RTÉ (Raidió Teilifís Éireann, Ireland's National Public Service Broadcaster), 18 November 2017.

Paraskevi Manolaki has been appointed as a Danish management committee representative in COST Action 16208 (European Cooperation in Science & Technology), the longest running European framework supporting trans-national cooperation among researchers, engineers and scholars across Europe, 23 November 2017.

Rasmus O. Bak has received together with Søren Degn, the Dept. of Biomedicine, Aarhus University, a grant of DKK 300,000 from the Carlsberg Foundation for ddPCR-system equipment, 24 November 2017.

Doug Speed has been awarded DKK 5.6 million by the Independent Research Fund Denmark (DFF) for the project entitled 'Methods to more efficiently analyse genetic data.' The grant will enable Doug Speed to build his own research group and to employ two new researchers at postdoc level, 27 November 2017.

Asad Jan has received a Lundbeck Foundation Postdoctoral fellowship award of DKK 900,000 to apply genome editing in a mouse model of Parkinson disease. The project will target the genetic makeup of spinal cord neurons using viral vectors to prevent the prion-like propagation of alpha-synuclein in disease models. Duration: 2017-2020, 28 November 2017.

Anja Bechmann has received an EU MEND grant by the Danish Agency for Science and Education of DKK 75,000 for the project 'Mining Ethics iNto Data applications'. The grant is an 'EUopSTART' grant that provides seed funding for seeking Horizon 2020 - Next Generation Internet, 5 December 2017.

Rasmus O. Bak has received a grant of DKK 1,100,000 from the Novo Nordisk Foundation for the project entitled 'CRISPR-mediated genomic integration of large therapeutic transgenes'. The grant has a duration of 2 years, 8 December 2017.

Søren Dinesen Østergaard has been awarded a grant of DKK 2.6 mill from the Independent Research Fund Denmark to test a new method for measuring the severity of schizophrenia for his project entitled 'Validation of PANSS-6: A Brief Rating Scale Measuring the Severity of Schizophrenia', 14 December 2017.

Anja Bechmann was appointed a member of the Editorial Board of the international journal *Digital Society* with commencement on 1 January 2018, 20 December 2017.

Michael Voldsgaard Clausen has received a Carlsberg Research Infrastructure grant of DKK 400,000 from the Carlsberg Foundation for electro physiology research equipment, December 2017.

Anja Bechmann was appointed as an expert to the new High Level Expert Group (HLEG) on 'Fake news and online disinformation' by the European Commission. The Group will contribute to the development of an EU-level strategy on how to tackle fake news, presented in the spring of 2018, 12 January 2018.

Rasmus O. Bak has received a grant of DKK 96,860 from the A. P. Møller Foundation for the Advancement of Medical Science for the project entitled 'ddPCR system til forskningsprojekter i kræftudvikling', 17 January 2018.

Tomonori Takeuchi was awarded the Novo Nordisk Foundation's prestigious Young Investigator Award of DKK 20 million (EUR 2.7 mill). The project runs from 2017-2024. The grant enables Takeuchi to establish both a research laboratory and a research group at DANDRITE, Aarhus University, February 2018.

Søren Dinesen Østergaard was appointed a Professor of Clinical Medicine at Aarhus University and Aarhus University Hospital Risskov, Dept. of Depression and Anxiety, 1 April 2018.

Jessica L. Barker has received a seed grant of DKK 49,200 from the Interacting Minds Centre, Aarhus University, for the project 'Inter-group cooperation: from ants to humans', April 2018.

Tomonori Takeuchi has received a grant of EUR 2300 from the Global Collaborative Research Project at the Brain Research Institute, Niigata University for the project 'Enhancing everyday memory with novelty'. 2018.

Asad Jan was awarded the best poster prize at 'Neuroscience Day 2018 - Rewarding Neuroscience' at Aarhus University, Denmark, 1 May 2018.

Tomasz K. Wojdacz accepted the invitation to join the editorial board of the journal *Clinical Epigenetics*, 4 May 2018.

Anja Bechmann was elected a member of the Jyllands-Posten Foundation board. *Jyllands-Posten* is Denmark's largest media company, 17 May 2018.

Rasmus O. Bak has received a grant of DKK 200,000 by the Riisfort Fonden for the research project 'Correction of genetic errors'. The project runs for a two-year period, 25 May 2018.

IN THE MEDIA

Dorothee Birke gave a 10-minute interview on the authorship of Nobel Prize laureate in Literature 2017 Kazuo Ishiguro to the Swiss national radio SRF for their 'Kultur' (Culture) programme, 6 October 2017.

Rasmus O. Bak gave an interview to the specialist journal *Ingeniøren* (The Engineer) for the article 'Genredigering på sprøjte skal kurere genetiske sygdomme', 23 November 2017.

Katie Barclay has created several podcast episodes on the subject 'Thinking with the History of Emotions' (<https://societyhistoryemotions.com/podcast/>), November 2017.

Btihaj Ajana is co-director of the documentary film *Surveillance Culture* that explores the different manifestations and locales of surveillance, weaving together experts' accounts and public opinions to reveal what is at stake in contemporary digital surveillance culture (www.youtube.com/watch?v=GqJM2GMOge0), 27 November 2017.

Jessica D. Wiskus gave an interview on her research to the article 'The Power of Music' for *Jutland Station*, 30 November 2017.

Rasmus O. Bak gave a video interview to the European Society for Gene and Cell Therapy (ESGCT) about his Young Investigator Award and his research, 30 November 2017.

Rasmus O. Bak gave an interview to *Ugeskrift for Læger* (The Journal of the Danish Medical Association) about his research in gene editing and CRISPR/Cas9: 'CRISPR er på vej fra mus til mennesker', 8 January 2018.

Armin W. Geertz is author of the article 'Religion: dumhed eller kulturel uomgængelighed?' in the newspaper *Politiken*, January 2018.

Rasmus O. Bak gave an interview to *Videnskab.dk* for the article 'CRISPR-krise: Immunforsvaret kan knuse verdens store genteknologiske håb', 12 January 2018.

Rasmus O. Bak gave an interview for the article 'Crispr-krise: Immunforsvaret angriber verdens store genteknologiske håb' to the national newspaper *Jyllands-Posten*, 13 January 2018.

Anja Bechmann gave an interview for the article 'EU går til angreb på falske nyheder der truer demokratiet' online at the Danish newspaper *Jyllands-posten.dk*, 15 January 2018.

Anja Bechmann gave an interview for the article 'EU går til angreb på falske nyheder der truer demokratiet' online at the Danish newspaper *Børsen.dk*, 16 January 2018.

Anja Bechmann gave an interview for the article 'Fake news' for the Danish newspaper *Lolland-Falsters Folketidende*, 16 January 2018.

Anja Bechmann gave an interview for the article 'EU går til angreb på falske nyheder' in the Danish newspaper *Berlingske*, 16 January 2018.

Anja Bechmann gave an interview for the article 'Amerikansk senats-rapport: Rusland har spredt falsk historie om dyrebordel i København for at svække demokratiet i Vesten' online at the Danish newspaper *Jyllands-posten.dk*, 16 January 2018.

Anja Bechmann gave an interview for the article 'Europa-Parlamentet frygter russisk indblanding i europæiske valg' in the Danish newspaper *Jyllands-Posten*, 17 January 2018.

Rasmus O. Bak gave an interview to *Videnskab.dk* for the podcast 'Hvad er CRISPR?' on his research in CRISPR and gene editing online at *Videnskab.dk*, 19 January 2018.

Rasmus O. Bak gave an interview for the article 'CRISPR-status: Så langt er vi nu, og her er udfordringerne' online at *Videnskab.dk*, 20 January 2018.

Andrew G. Newby gave an interview to the Irish radio *ROSFM* on his research and the forthcoming exhibition 'NÄLKÄ! The Great Finnish Famine' opening at Strokestown Park Museum, Ireland, 22 January 2018.

Anja Bechmann gave an interview for the TV2 news broadcast 'Falsk porno åbner for en ny bølge af propaganda og falske nyheder' at *TV2 News Online*, 31 January 2018.

Tobias Wang gave an interview to *Videnskab.dk* for the online article 'Fisk lærte at gå i havet, før de kravlede op på land' online at *videnskab.dk*, 8 February 2018.

Anja Bechmann gave an interview for the Danish national radio broadcast *DR Digital* on the subject 'Digitalt: Dine data er våben vendt imod dig', 8 February 2018.

Tobias Wang gave an interview to *Videnskab.dk* for the online article 'Forunderlige søstjerner lyser op i Arktis' mørke dyb' at *Videnskab.dk*, 10 February 2018.

Anja Bechmann gave an interview for the article 'Menneskelighed er nøglen til at få succes med IoT-teknologi' in the Danish newspaper *Jyllands-Posten*, 18 February 2018.

Tobias Wang gave an interview to *Videnskab.dk* for the online article 'Aber med store næser scorer flest hunner', 21 February 2018.

Joshua Nash is author of the newspaper article 'A bridge too (bloody) far?' in *Placenames Australia*, 1 March 2018.

Tobias Wang gave an interview for the news broadcast session on the Danish Radio *DR P4 Østjylland* at 8:15 and 8:25 on his research on Eugenics, 2 March 2018.

Anja Bechmann gave an interview for the article 'Du sælger ud af dit privatliv, når du beder om karriererådgivning på Facebook' online at the Danish newspaper *Mandag Morgen*, 7 March 2018.

Magnus Kjærgaard is author of the article 'Det sker i hjernen, når vi skaber minder' online at *Videnskab.dk*, 9 March 2018.

Anja Bechmann gave an interview for the article 'Ekspert-gruppe ruster Europa-Kommissionen til kampen om falske nyheder' online at the Danish newspaper *Mandag Morgen*, 13 March 2018.

Anja Bechmann gave an interview for the article 'Ytringsfrihed er den store knast i at knække fake news' at *Mediawatch*, 15 March 2018

Anja Bechmann gave a live interview for the TV news broadcast *DR DEADLINE* about the historical downfall of Facebook stocks, 20 March 2018.

Anja Bechmann gave an interview for the article 'Den ondeste sag i Facebooks historie' online at *videnskab.dk*, 20 March 2018.

Anja Bechmann gave an interview for the TV-show *DR DAGEN* about Facebook and Cambridge Analytica, 20 March 2018.

Anja Bechmann gave an interview for the article 'Den ondeste sag i Facebooks historie' online at *videnskab.dk*, 20 March 2018.

Anja Bechmann gave an interview for the article 'Researchers say it was easy to take people's data from Facebook' in *NBCnews*, 21 March 2018.

Anja Bechmann gave an interview for the article 'Firmaet, der legede med psykologien i et helt land' in *Kommunikationsforum*, 22 March 2018.

Anja Bechmann gave an interview for the Danish radio broadcast *24syv Aflyttet* on the topic 'Facebook psyko privacy - når vi bliver manipuleret af os selv?', 25 March 2018.

Anja Bechmann gave an interview for the article 'Facebook's digital empire hard to shake despite Cambridge Analytica scandal' online at *Politico.eu*, 25 March 2018.

Anja Bechmann gave an interview for the article 'Cambridge Analytica: Whistleblower skød stormen i gang' online at *Bureaubiz.dk*, 22 March 2018.

Anja Bechmann is co-author of the debate article 'Frygt fremtiden. Eller stop på ingeniørerne' in the Danish Newspaper *Jyllands-Posten*, 7 April 2018.

Michael Bang Petersen gave an interview for the article 'Nogle mænd vil bare se verden brænde' in the newspaper *Berlingske*, 15 April 2018.

Michael Bang Petersen gave an interview for the article 'Danskere deler fake news og er klar til at omstyrte samfundet: »Nogle mænd vil bare se verden brændek«' on *Berlingske* online at *B.dk*, 15 April 2018.

Michael Bang Petersen gave an interview for the article 'Vil 10 procent af danskerne virkelig omstyrte samfundet' online at *Videnskab.dk*, 21 April 2018.

Anja Bechmann gave an interview for the DR National TV news broadcast *DR TV-Avisen* on the subject 'Forskere vil have adgang til data', *DR1*, 28 April 2018.

Anja Bechmann gave an interview on the Danish Radio national broadcast *P1* on the subject 'Forskere vil have adgang til data', 28 April 2018.

Anja Bechmann gave an interview for the article 'Danske forskere fører an i ny protest mod Facebook' online at *dr.dk*, 28 April 2018.

Nikolaj T. Zinner gave an interview for the article 'Hvad er antistof?' online at *Videnskab.dk*, 7 May 2018.

Michael B. Petersen gave an interview for the article '»Bekymrende« tal: Mange danskere i tvivl, om vaccine giver autisme - og om månelanding fandt sted' online at *Videnskab.dk*, 8 May 2018.

Michael Bang Petersen gave an interview for the article 'Politisk polarisering nærer konspirationsteorier' online at *Kristeligt-Dagblad.dk*, 14 May 2018.

Rasmus O. Bak gave an interview for the article 'CRISPR-conversation' online at *Synthego.com*, May 2018.

Anja Bechmann gave an interview for the article 'Fake news er tillidshacking. Og derfor er det en trussel mod private virksomheder' in the Danish national newspaper *Jyllands-Posten, Business Section*, 18 May 2018.

Anja Bechmann is the focus of the newspaper article 'AKTUELT PORTRÆT: It-ekspert i JP's fondsstyrelse' in *Jyllands-Posten*, 18 May 2018.

Anja Bechmann gave an interview for the article 'Og derfor er de ten trussel mod private virksomheder' online at *Jyllands-Posten.dk*, 18 May 2018.

Anja Bechmann gave an interview for the article 'Forskere advarer: Vi må ikke panikke og slette for mange data' online at *dr.dk*, 26 May 2018.

Andrew G. Newby gave an interview to the Finnish newspaper *Ylä Karjala* for the article 'Wreaths In Memory of Famine Victims', 27 May 2018.

Katie Barclay has contributed with content from her research for four broadcast episodes entitled 'Time Travels', *BBC Radio Scotland*, June 2018.

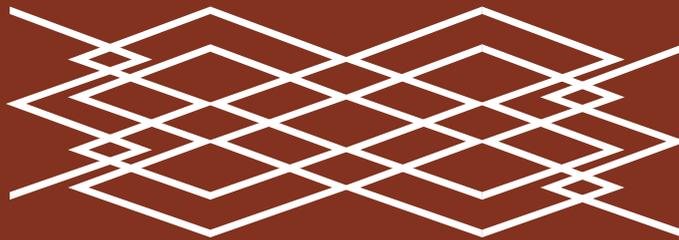
Rasmus O. Bak gave an interview for the article 'Mavepuster til fremtidens genteknologi-håb: CRISPR kan muligvis give kræft' online at *Videnskab.dk*, 18 June 2018.

Andrew G. Newby gave an interview to the Finnish newspaper *Viispiikinen* for the article '150 Years Ago People Died of Starvation in Kivijärvi', 27 June 2018.

Anja Bechmann gave an interview for the article 'Is the academy too close to Silicon Valley?' online at *THE, Times Higher Education*, 19 July 2018.

Joshua Nash gave an interview about his research on the Pitcairn islands and linguistics for the radio broadcast entitled 'Evening with Peter Goers' on *Australian Broadcasting Corporation (ABC)*, Adelaide, on 31 July 2018.

AIAS EVENTS



Conferences, symposia, workshops, guest lectures, the Fellows' Seminar Series: **disciplinary, inter- and multi-disciplinary**. The number of events organized by the AIAS Fellows in 2017-18 bears witness to the **high academic activity level** of the fellows. The events are **as diverse in topics and in format** as the fellows' academic disciplines. See what Fellows, Aarhus University researchers and international collaborators have been engaged with...



AIAS EVENTS

AIAS Symposium: *Mobilizing Home(s): New Approaches to the Study of Home in Contemporary Literature and Culture*. Two-day symposium with 15 speakers. Organized by AIAS Fellow Dorothee Birke in collaboration with Stella Butter, University of Koblenz-Landau, Germany, 14-15 September 2017.

AIAS Fellows' Seminar: 'X-ray Total Scattering Techniques for Characterizing Nanomaterials' by AIAS Fellow Federica Bertolotti, 18 September 2017.

AIAS Workshop: *Cultic Connections in the North Aegean Region*. Organized by AIAS Fellow Consuelo Manetta and Associate Professor Troels Myrup Kristensen, School of Culture and Society, Classical Archaeology, Aarhus University, Denmark, 22 September 2017.

AIAS Workshop: *Autocratic Diversity: New Distinctions and Neglected Issues*. Organized by AIAS Fellow, Professor Svend-Erik Skaaning in collaboration with the Conflict and Democratization (CODE) project group, 28-29 September 2017.

AIAS Fellows' Seminar: 'Computational Green Chemistry: strategies pursuing a cleaner atmosphere' by AIAS Fellow Luís Viegas, 2 October 2017.

IAS Visit by FRIAS, Germany: Visit from the Freiburg Institute of Advanced Studies (IAS), 6 October 2017.

AIAS Joint Research Presentation: Extended one-day Fellows' Seminar with short 6-minute research presentations by all AIAS Fellows, 9 October 2017.

AIAS Fellows' Seminar: 'Rhythm and Recognition: Exploring Music, Time, and the Self' by AIAS Fellow Jessica Wiskus, 23 October 2017.

AIAS Former Fellow Conference: *Markets with Search Frictions*. Organized by AIAS Former Fellow Bent Jesper Christiansen and the Dale T. Mortensen Centre, Aarhus BSS, Aarhus University 26-28 October 2017.

AIAS Book Launch Reception: Presentation of a new Routledge book entitled *The Aesthetics of Scientific Data Representation: More Than Pretty Pictures* by AIAS Former Fellows Lotte Philipsen and Rikke Schmidt Kjærgaard, 30 October 2017.

AIAS Fellows' Seminar: 'Mind Over Chatter' by AIAS EURIAS Fellow Samuel McCormick, 6 November 2017.

AIAS Associate Event: Opening of the Center for Quantum Optics and Quantum Matter (CQOM). Organized by AIAS Associate & Niels Bohr Professor Thomas Pohl, 8 November 2017.

AIAS Fellow Guest Talk at Musicology: 'Music and Empathy: Some Insights from Phenomenological Research' talk by AIAS Fellow Jessica Wiskus, invited and organized by the Dept. of Musicology, Aarhus University, 9 November 2017.

AIAS Workshop: *Interdisciplinary Research in Social Sciences and Public Health*. Organized by AIAS Fellow, Associate Prof. Iryna Mazhak, 13-14 November 2017.

AIAS Fellows' Seminar: 'Translational Psychiatry. From genes to mice to men to populations to global health' by AIAS Fellow Søren Dinesen Østergaard, 13 November 2017.

AIAS Fellows' Seminar: 'The Family. What difference does it make?' by AIAS EURIAS Fellow Katie Barclay, 20 November 2017.

AIAS & AU ATV Joint Seminar: Business and research seminar in Aarhus on *GDPR and digital research dilemmas* organized by AIAS Fellow Anja Bechmann, 21 November 2017.

AIAS Conference: *FEAR: Brain, Behaviour, Society*. The conference was part of the 'FEAR' 2017 Topic of the Year for UBIAS. The conference gathered leading international researchers from a variety of fields for two days to present newest knowledge on fear. The conference was organized in five multidisciplinary sessions, with contributions from several fields. Organized by AIAS Fellows Magnus Kjærsgaard and Isabel Kusche in collaboration with AIAS Associate, Associate Prof. Sadeq Nabavi, DANDRITE, Aarhus University and Associate Prof. Mia Skytte O'Toole, Dept. of Psychology and Behavioural Science, Aarhus University, 4-5 December 2017.

IAS Visit by IWM, Austria: Visit from the IWM, Institut für die Wissenschaften vom Menschen, 11 December 2017.

AIAS Film screening: Screening of the AIAS & AU film co-production: *Surveillance Culture* followed by a question and debate session. Organized by AIAS Former Fellow, Associate Prof. at Kings College London Btihaj Ajana, 8 December 2017.

AIAS Fellows' Seminar: 'Quantum Few-Body Engineering. Building quantum networks one unit at a time' by AIAS Fellow Nikolaj Zinner, 11 December 2017.

AIAS Funding Seminar: 'Research Funding Seminar' with presentations on the Danish funding landscape, EU funding and funding strategy for AIAS Fellows given by the Aarhus University Research Support Office and organized by AIAS in collaboration with the RSO, 13 December 2017.

AIAS Meeting: The Young Academy at AIAS. Organized by Nikolaj T. Zinner, AIAS Fellow & Associate Prof, Member of the Young Academy, The Royal Danish Academy of Sciences and Letters in Copenhagen, 30 January 2018.

AIAS Joint Research Presentation: Extended one-day Fellows' Seminar with short 6-minute research presentations by all AIAS Fellows, 5 February 2018.

AIAS Fellows' Seminar: 'Solving genetics: Using heritability analysis' by AIAS Fellow Doug Speed, 19 February 2018.

AIAS Fellows' Seminar: 'Amyloid fold. Nature's Swiss army knife or a Trojan horse?' by AIAS Fellow Anni Kleino, 26 February 2018.

AIAS Shut Up and Write Sessions: A collective writing forum where AIAS Fellows meet to write or read while enjoying the silence and good karma of colleagues working alone/together, 5 March 2018.

AIAS Fellows' Seminar: 'This humanitarian act': Danish famine relief in the 1860s' by AIAS Fellow Andrew Newby, 5 March 2018.

AIAS and AU panel evaluation visit: International evaluation panel visited Aarhus University and AIAS as part of the evaluation of AIAS. The international panel members were appointed by the Aarhus University Rector Brian Bech Nielsen and consisted of four members: Dr. Wilhelm Krull, Volkswagen Foundation (chair); Professor Diana Hicks, Georgia Institute of Technology; Prof Peter Goddard, Princeton; Prof Michal Linal, The Hebrew University of Jerusalem. 12-13 March 2018.

AIAS and LUMEN Symposium: *Religion and Social Welfare. Lutheranism and Societal Development*. Organized by AIAS Fellow, Associate Prof. Andrew Newby in collaboration with Associate Prof. Nina Javette Koefoed, School of Culture and Society – History, Aarhus University, Denmark, 19 March 2018.

AIAS Course: *Statistical Genetics Short Course – Methods for analysing complex trait GWAS data*. Organized and taught by AIAS Fellow, Assistant Prof. Doug Speed, 22 March 2018.

IAS Visit by HCAS, Finland: Visit from Helsinki Collegium for Advanced Studies (HCAS), 5 April 2018.

AIAS Shut Up and Write Sessions: A collective writing forum where AIAS Fellows meet to write or read while enjoying the silence and good karma of colleagues working alone/together, 9 April 2018.

AIAS Fellows' Seminar: 'The Third Dimension: From Point Cloud to Carbon and Connectivity' by AIAS Fellow Cici Alexander, 9 April 2018.

AIAS Sandbjerg Career Development Seminar: Two-day offsite seminar for all AIAS Fellows and staff. Presentations: Pernille Frisch, business psychologist, partner in HumanAct: 'Resilience and motivation in the career of the elite researcher'. Jens Oddershede, Prof, Chairman of the Danish Council for Research and Innovation Policy, Former Rector of the University of Southern Denmark, and Søren Rud Keiding, Vice dean of research, Science and Technology, Aarhus University, and member of Danish Council for Research and Innovation Policy: 'Visions for the future of academia'. Maria Theresa Norn, Head of Analysis at the Think Tank DEA and Senior Researcher at the Danish Center for Studies in Research and Research Policy, Aarhus University: 'Imagining a different future for academia', 17-18 April 2018.

AIAS Fellows' Seminar: 'Social AI: The Acting Machine' by AIAS Fellow Anja Bechmann, 23 April 2018.



AIAS Fellows at Festival of Research/Forskningens Døgn: Two talks by AIAS Fellows: Joshua Nash 'Preposition trauma: how can we improve talking about space?' and Anna B. Neuheimer 'Timing is everything: why fish do what they do when they do it'. The Festival of Research is a national knowledge festival that takes place each year in the spring with about 500 events and more than 65,000 visitors around Denmark. The Danish Ministry of Higher Education and Science is behind the initiative, which aims at bringing research and the Danish population closer, 26 April 2018.

AIAS Workshop: Exploring Island Languages. Organized by AIAS Fellow, Associate Prof. Joshua Nash in collaboration with Associate Prof. Peter Bakker, School of Communication and Culture – Linguistics, Aarhus University, Denmark, 30 April 2018.

AIAS Associate Workshop: 2nd International Workshop on Rydberg Excitons in Semiconductors. Organized by AIAS Associate, Niels Bohr Professor Thomas Pohl in collaboration with Manfred Bayer, Technical University of Dortmund, Germany and Stefan Scheel, University of Rosstock, Germany, 3-4 May 2018.

AIAS Shut Up and Write Sessions: A collective writing forum where AIAS Fellows meet to write or read while enjoying the silence and good karma of colleagues working alone/together, 7 May 2018.

AIAS Fellows' Seminar: 'Stream Ecosystems: Ecological implications of a Changing Environment' by AIAS Fellow Paraskevi Manolaki, 7 May 2018.

AIAS & AU Joint Event: AIAS and the Junior Researcher Development Programme – Afternoon talks on Gender and Science with talks by: Mathias Wullum Nielsen, Assistant Prof., Department of Political Science, Danish Centre for Studies in Research and Research Policy and Lea Skewes, PhD fellow, School of Culture and Society, Interacting Minds Centre. Organized by Junior Researcher Development Programme and AIAS, 9 May 2018.

AIAS Symposium: Family, Memory and Identity. Two-day symposium with 23 speakers organized by AIAS Fellow, Associate Prof. Katie Barclay in collaboration with Associate Prof. Nina Javette Koefoed, School of Culture and Society – History, Aarhus University, Denmark, 23-24 May 2018.

AIAS Fellows' Seminar: 'Understanding the Universe – from the smallest to the largest' by AIAS Fellow Thomas Tram, 28 May 2018.

AIAS Fellows' Seminar: 'Gene Editing – A CRISPR future for Gene Therapy' by AIAS Fellow Rasmus Bak, 11 June 2018.

AIAS Workshop: Nanomat@AU: Forefront methodologies and advances in nanomaterials characterization. Organized by AIAS Fellow, Postdoc Federica Bertolotti, 13 June 2018.

AIAS Joint Event: AIAS and the Junior Researcher Development Programme – Afternoon talks on Interdisciplinary collaboration with talks by: Andreas Roepstorff, Prof and Director, Interacting Minds Centre, Aarhus University and Peter Gorm Larsen, Prof and Head of the Centre for Digitalisation, Big Data and Data Analytics, DIGIT, Aarhus University. Organized by Junior Researcher Development Programme and AIAS, 18 June 2018.



AIAS Workshop: *Physiology in the Wild*. Organized by AIAS Fellow, Prof. Tobias Wang in collaboration with AIAS Fellow, Prof. Peter Teglberg Madsen and Prof. Mads Frost Bertelsen, Dept. of Veterinary and Animal Sciences, University of Copenhagen and Copenhagen ZOO, 19-20 June 2018.

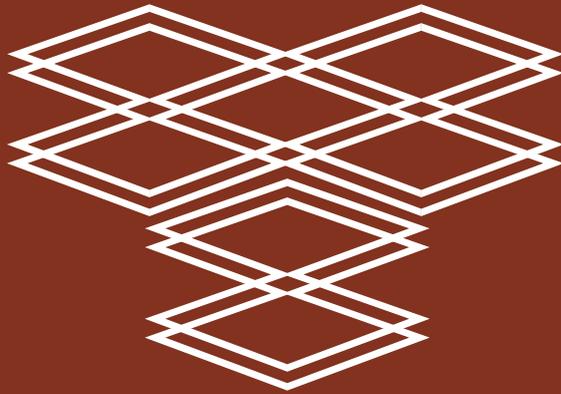
AIAS 5 Year Anniversary and Summer Gathering: A celebration of AIAS's 5-year birthday with an afternoon of talks, refreshments and music. Celebratory talks by AIAS Director Morten Kyndrup; Rector of Aarhus University, Brian Bech-Nielsen; and Principal Björn Wittrock, SCAS Uppsala University, Sweden. Scholarly talks by AIAS Former Fellows Bjørn Panyella Pedersen and Rebecca Simmons. Organized by AIAS, 22 June 2018.

AIAS Associate Workshop: Joint CQOM & ITAMP Workshop on *Quantum Simulations with Atoms and Light*. Organized by AIAS Associate, Niels Bohr Professor Thomas Pohl in collaboration with Associate Prof. Jan Arlt, Aarhus University, Associate Prof. Georg Bruun, Aarhus University, Prof. Alexander Szameit, University of Rostock and Director, PhD Hossein Sadeghpour, ITAMP, Harvard University. 13-17 August 2018.

AIAS Conference: *The Thinking Machine: Interdisciplinary Perspectives on Neural Networks*. Three-day international conference focusing on the background, theory, and applications of neural networks in a cross-disciplinary manner. Organized by five AIAS Fellows Nikolaj T. Zinner, Dorothee Birke, Anja Bechmann, Asad Jan and Michael Voldsgaard, 21-23 August 2018.



HOSTED EVENTS



The excellent **facilities of AIAS are open** to Aarhus University academics and departments and to external institutions. See a selection of the hosted events of the academic year of 2017-18, and take inspiration from them. AIAS will continue **welcoming and hosting academic events** in the year to come...

HOSTED EVENTS

Course: 'Glucose Omics Explorer course': on software for researchers to explore and analyze large biological datasets. Organized by Glucose, Lund, Sweden, 5 September 2017.

Seminar: 'Anæstesi af forsøgsdyr' organized by Dept. of Clinical medicine, Faculty of Health, Aarhus University, 12 September 2017.

Lundbeckfond Lecture: 'Hjernen efter depression og hjerneskade' organized by Folkeuniversitetet, 19 September 2017.

Lundbeckfond Lecture: 'Syntesebiologi: Planter som fremtidens medicin' organized by Folkeuniversitetet, 10 October 2017.

NOWAGG Meeting: *New Nordic Ways to Green Growth (NOWAGG): Strengthening the foundation for technological green growth innovation policy.* Organized by project partners: Mikael Skou Andersen Dept. of Environmental Science, Aarhus University, Denmark; Annica Kronsell, Lund University, Sweden; Jon Birger Skjærseth, Fridtjof Nansen Institute, Norway; Patrick Söderholm, Luleå University of Technology, Sweden; and Tuula Teräväinen-Litardo, University of Eastern Finland, Finland, 21 September 2017.

Anniversary celebration: 10-year celebration of the Center for Geomicrobiology, Aarhus University, 29 September 2017.

Jens Christian Skou award ceremony: Award ceremony with announcement of the recipient of the Jens Christian Skou award. Organized by the Faculty of Health, Aarhus University, 11 October 2017.

Meeting: 'AUPA': Aarhus University PhD Association Board Meeting, 19 October 2017

Meeting: DARIAH General Assembly, 1-4 November 2017.

Graduation ceremony: for the Danish School of Education graduates. Organized by DPU, Faculty of Arts, Aarhus University, 4 November 2017.

Meeting: Junior Researchers General Assembly, 9 November 2017.

Lundbeckfond Lecture: 'Fra Big Bang til det moderne menneske' organized by Folkeuniversitetet, 14 November 2017.

PhD Defense: 'Phenomenology and functions of episodic counterfactual thinking in relation to remembering and future thinking' by Müge Özbek Akçay, Dept. of Psychology and Behavioural Sciences, Aarhus BSS, Aarhus University, 22 November 2017.

PhD Course: 'How to get published' organized by the four Graduate Schools, Aarhus University, 7 December 2017.

Education Day: 'Uddannelsesdagen'. Education day and fair organized by the Faculty of Health, Aarhus University, 13 December 2017.

Strategy Seminar: Strategy seminar for the School of Culture and Society, Faculty of Arts, Aarhus University, 5 January 2018.

Meeting: Annual Consortium Meeting organized by the Dept. of Clinical Immunology, Faculty of Health, Aarhus University, 8-9 January 2018.

Reception: Appointment reception for new head of department, Prof. Ole Bækgaard, the Dept. of Public Health, Faculty of Health, Aarhus University, 11 January 2018.

Symposium: *Memory Symposium for Bertel Møhl.* Organized by Prof. Peter Teglberg Madsen, Bioscience, Science and Technology, Aarhus University, 23 January 2018.

Lundbeckfond Lecture: 'CRISPR – DNA-saksen der bekæmper arvelige sygdomme' organized by Folkeuniversitetet, 6 February 2018.

Women in Science Day: Celebrating the UN's International Day for Women and Girls in Science, organized by Ashley Pearcy, Faculty of Science and Technology, Aarhus University, 10 February 2018.

Seminar: 'The Danish Housing Market -Review of lease contract, and purchasing real property' organized by the UIC, University International Club, Aarhus University, 21 February 2018.

Symposium: 'Festsymposium for Professor emerita Elisabeth Hall' organized by Section for Nursing, Faculty of Health, Aarhus University, 1 March 2018.

Conference: *Fremtidens universitet bygger bro* organized by the Center for Collaborative Health, Faculty of Health, Aarhus University, 15 March 2018.

Lundbeckfond Lecture: 'Epigenetik og kræft – cellernes hukommelse og et nyt våben i behandling' organized by Folkeuniversitetet, 15 March 2018.

Congress: *59th Annual Meeting of the Scandinavian College of Neuropsychopharmacology* organized by the Scandinavian College of Neuropsychopharmacology (SCNP), 11-13 April 2018.



Meeting: WATEC – Advisory Board Meeting organized by the Centre for Water Technology, Aarhus University, Denmark, 17 April 2018.

Match Making Day on AU Health: A marketplace for students, researchers, educators and businesses. Organized by the Faculty of Health, Aarhus University, 19 April 2018.

Lundbeckfond Lecture: 'Livet med Parkinson' organized by Folkeuniversitetet, 24 April 2018.

Lundbeckfond Lecture: 'Vidensarrangement: Personlig medicin' organized by Folkeuniversitetet, 1 May 2018.

Meeting: 'Akademisk Råd' organized by the Deans Office, Faculty of Health, Aarhus University, 17 May 2018.

International Dual Career Network (IDCN): Dual career network to facilitate job searching and information about the local job market among the partners of international employees at AU. Organized by the International Centre, Aarhus University, 30 May 2018.

Inaugural lecture: Appointment of and talk by new Professor Rune Hartmann from the Dept. of Molecular Biology and Genetics, Science and Technology, Aarhus University, 31 August 2018.



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INTERNATIONAL EVALUATION OF AIAS



After close to five years in operation, AIAS has undergone an international evaluation in 2017-18 by an independent review panel appointed by the Aarhus University Rector Brian Bech Nielsen.

The panel members were:

Dr. Wilhelm Krull, Secretary General of the Volkswagen Foundation (chair)

Professor Diana Hicks, School of Public Policy, Georgia Institute of Technology, USA

Professor emeritus Peter Goddard, former Director of the Institute of Advanced Studies at Princeton, USA

Professor Michal Linial, former Director of the Israel Institute of Advanced Studies, The Hebrew University of Jerusalem, Israel.

The main conclusion in the panel's report to Aarhus University, dated April 2018, is:

"The expert panel finds the overall achievements of AIAS to be very impressive.

Within a relatively short time, AIAS has been brought into an operational mode characterized by significant accomplishments and awareness of AIAS at the international arena."

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Professor, Aarhus University, Denmark

Morten Kyndrup

AIAS Executive Director, Professor, Aarhus University, Denmark

STAFF

Morten Kyndrup

AIAS Executive Director, Professor, kyndrup@aias.au.dk

Maya Jepsen

Deputy Director, maj@aias.au.dk

Lena Bering

Communications Officer, lber@aias.au.dk

Helle Villekold

AIAS-COFUND Programme Manager, helle@aias.au.dk

Tanya Majlund McGregor

Administrative Officer, tanya@aias.au.dk

Pia Leth Andersen

Executive Secretary, plan@aias.au.dk

Vibeke Moll Sorensen

Relocation Officer, vms@au.dk

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- Aarhus University Research Foundation
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AARHUS UNIVERSITY RESEARCH FOUNDATION
AARHUS UNIVERSITETS FORSKNINGSFOND



Aarhus Institute of Advanced Studies
Aarhus University
Høegh-Guldbergs Gade 6B
DK-8000 Aarhus C
Denmark

PHONE: +45 8715 3692
E-MAIL: info@aias.au.dk
TWITTER: @AIAS_dk
WEB: aias.au.dk