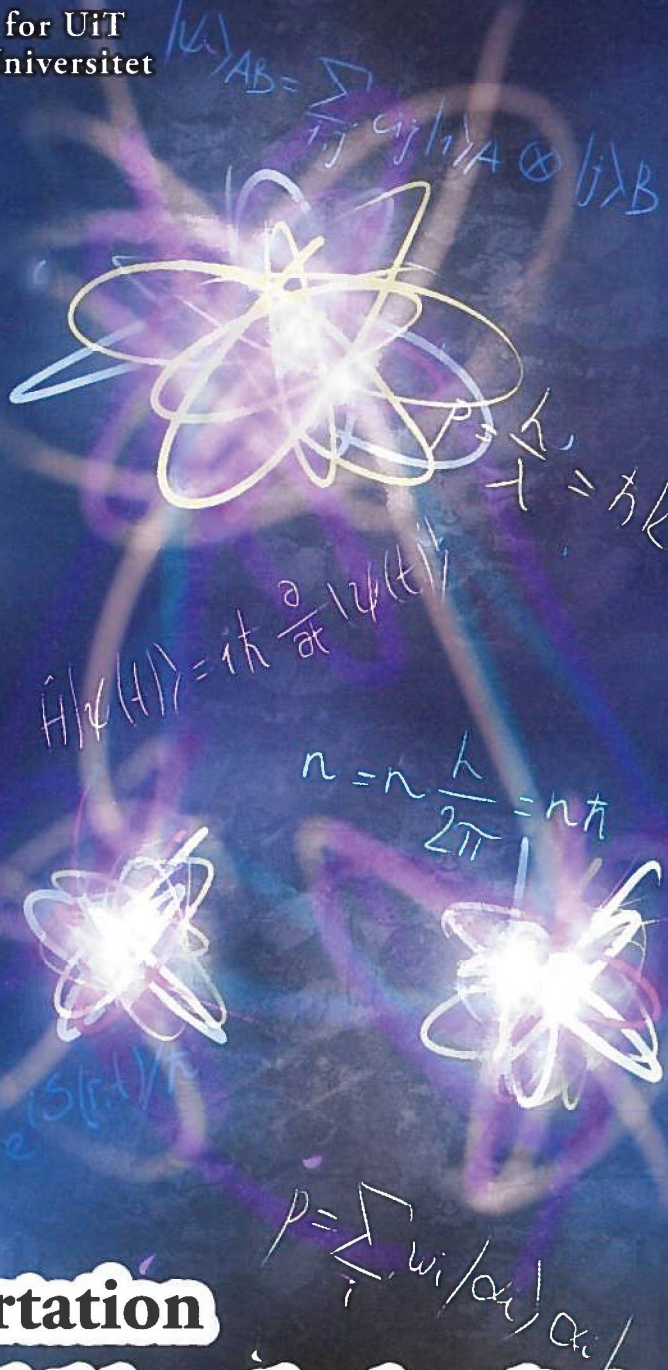


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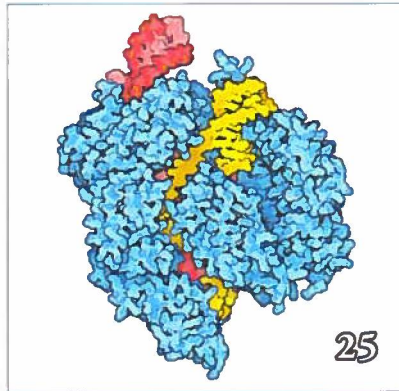
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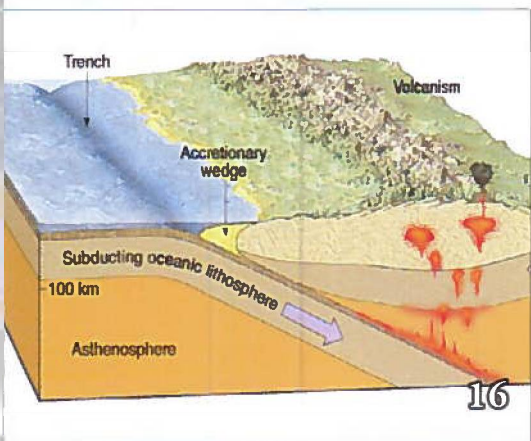
- > **Teleportation**
- > **Er du skikket til yrket ditt?**
- > **Skeletons on Svalbard**
- > **Northern Lights – 'A kiss blown by the sun'**



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En stor takk til våre medarbeidere!

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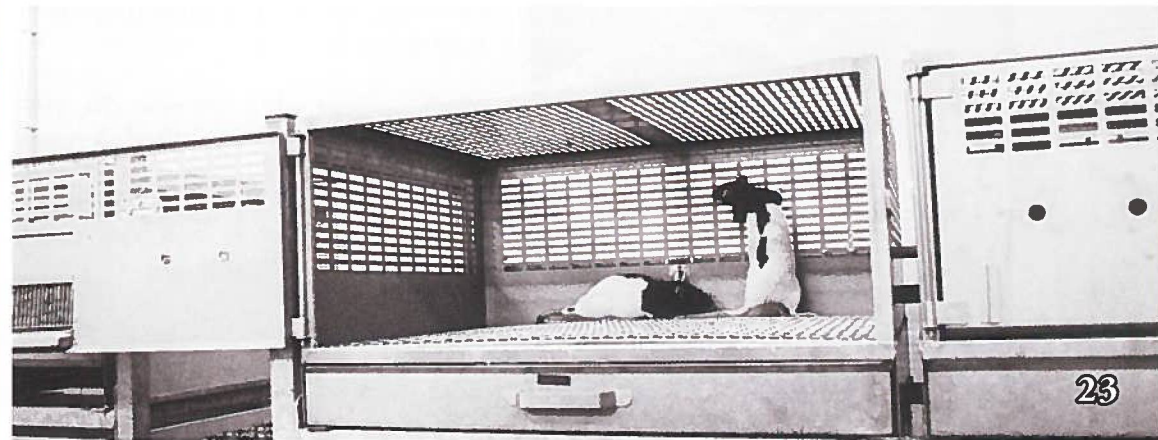
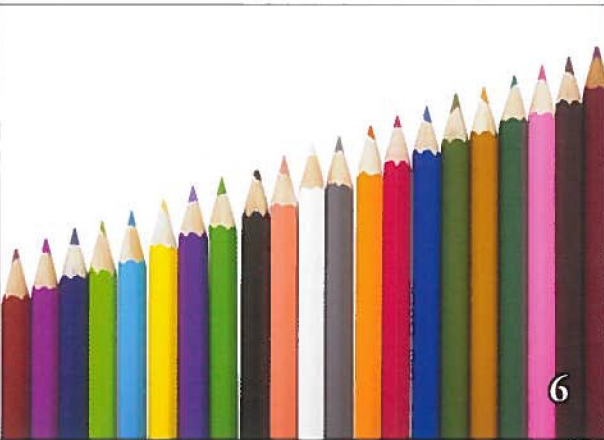
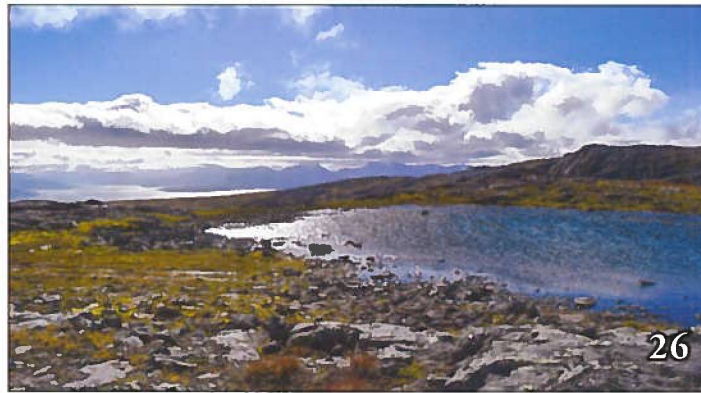
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LEDERKOMMENTAR

TEKST: Mats Johansen Beldo,
FOTO: Olga Shavrina

Kjære leser!

Debut-Uka er over og semesteret er offisielt kommet i gang, dermed er skuddet for studiestarten avfyrt! Tusenvis av ferske studenter har vrimlet rundt UiT i et forsøk for å finne seg sin plass på universitetet og komme seg litt i orden. I denne utgavens lederkommentar vil jeg gi deg noen tips som du kan ta med deg videre utover høsten.

Smil og vær glad til alle du møter, det lønner seg alltid å være litt ekstra sosial i studietiden. De venner du får nå vil du garantert ha resten av livet, slik var det i mitt tilfelle iallfall.

Men noe av det viktigste er vel kanskje økonomien, den er det ikke bare å holde styr på. Utover høsten merker du kanskje at noe av det som hjelper mest på i studenttilværelsen er å ha orden på økonomien. Det å ha orden på dette alene er for noen veldig nytt og kan virke utfordrende. Jeg anbefaler deg å loggføre inntektene og hva du bruker penger på.

Dessverre er det slik at studenter i dag ikke har så veldig god råd, så det er en fordel å ha seg noen kroner ved siden av stipendet. Lærebøker er for så vidt veldig dyre og det kan lønnes å kjøpe seg noen brukte, slik unngår du et kipt pengesluk.

Sist men ikke minst; Sett pris på studietiden! De fleste av oss gjennomgår studietiden bare en gang, så nyt den for alt det er verdt. Noen lar studieårene forsvinne i festligheter, mens andre flytter inn på lesesalen og kommer ikke ut før eksamen er overstått. Husk for all del, det går an å få til både pose og sekk, middelveien er som kjent ett godt veivalg. Studenter som har engasjert seg ved siden av studietiden i ulike verv, viser seg å ha en fordel på arbeidsmarkedet etter endte studier. Mitt råd til deg som student, er å finne seg en hobby av interesse og dyrke den med lidenskap.

Ha en fin september!
Hilsen, Redaktøren.

Utopia for 35 år siden..

STATSBUDSJETTET OG STUDENTØKONOMIEN !

Utvikling av rentefoten i låneløssa.

Rentefoten av studielåne har økt sterkt dei siste åra (sjå tab..)

År:	1947	1956	1959	1967	1971	1975
% :	2,75	3,75	4,25	4,75	5,75	6,50

Kvart hopp i rentefoten tyder ei vesentleg auke i gjeldsbøra. Berre det siste hoppet i 1975 på 3/4% førte til at eit lån på 40.000 kr. måtte betalast attende med 6000 kr. meir.

I tillegg til auken i rentefoten vurderer staten og renter i studietida. Det vil sjølsagt tyde ei forverring for alle lånesøkjarene, men hardast vil det ramme dei med lengst studietid.

Dei store lånebeløpa fører med seg at betalingstida aukar. I 1964 var vanleg betalingstid omlag 9 år, i dag er 25 år vanleg. Rentetida vert lengre og det vert meir å betale attende på lånet.

Utvikling av borteboerstipend.

Parallelt med at rentefoten og betalingstida har auket, har stipendandelen vorte mindre. Målsættinga for borteboerstipendet da dette

ble innført i 1968, var å dekke meirutgiftene til studentane som bur heimefrå i studietida. Ut fra opplysningar fra Statistisk Senteralbyrå, kan ein rekna at meirutgiftene i 76/77 var 790 kr. Dette året var borteboerstipendet på 300 kr. i månaden.

Borteboerstipendet utgjorde i 69/70 26% av kostnadsnormen. Sidan den gong har prosenten stadig gått nedover. I 77/78 reknar ein at den vil vera 17,45% av kostnadsnormen, iflg. statsbudsjettet. Til samanlikning går NSU inn for at stipendene (grunnstipend og borteboerstipend) skal utgjera 40% av kostnadsnormen.

Grunnstipend.

Grunnstipendet har stige frå 900 til 1000 kr. på dei 7 åra det har eksistert. I røynda har det, grunna prisstigninga, vorte kraftig redusert.

Iflg. statsbudsjettet for -78 vil satsane sjå slik ut:

Borteboerstipend:	3850 kr.
(Aukning på 13,2%)	
Grunnstipend:	1000 kr.
Kostnadsnorm:	2050 kr.
(Tala er gjøvne av NSU)	

Stipendandelen vert altså på 18,78%.

Alt dette skjer samstundes som husleigene på studentbyane, samt kantineprisane, aukar. Student-samskipnaden har søkt staten om

dispensasjon frå alt som heiter prisstopp.

Statsbudsjettet for -78 syner klart at det er arbeidsfolk og studenter som skal bera børa av den økonomiske krisa.

Studentane lyt no diskutera korleis vi skal møte desse forverringstil-taka, som i høg grad svekkjer økonomien vår. Staten gjev oss ikkje noko utan vidare, - det vi vil ha, lyt vi sloss for.

Ingen student kan roleg sjå på at lån og stipend i røynda stadig vert mindre, mens prisar og husleiger berre stig. Korleis kan vi møte desse åtaka frå staten? Dette er spørsmål vi vonar vil skape brei diskusjon studentane i mellom.

SU.

DEMONSTRASJON MOT SAMSKIPNADEN SITT FRAMLEGG TIL BUDSJETT.

The Best Present From UiT

TEXT: Alena Antipina
 PHOTO: www.UiT.no

Overview of the most wanted event of this September

Honestly speaking, I was so nervous before my birthday this year. Do you want to know, how that refers to the topic of the issue? Simply – Arbeidslivsdagen took place exactly on the date, which was definitely the best present not only for me, but surely for all the students of UiT.

To begin with, preparation had started already in the evening on 7th: the canteen and the passage was full of volunteers, concentrated on following the plan of 'sitting arrangement'. Such a noisy exciting atmosphere!

This excitement could be even felt, when it all started at the day of the event already at 10.00! To tell you the truth, it was pretty obvious that the audience had been divided into 3 particular groups of participants:

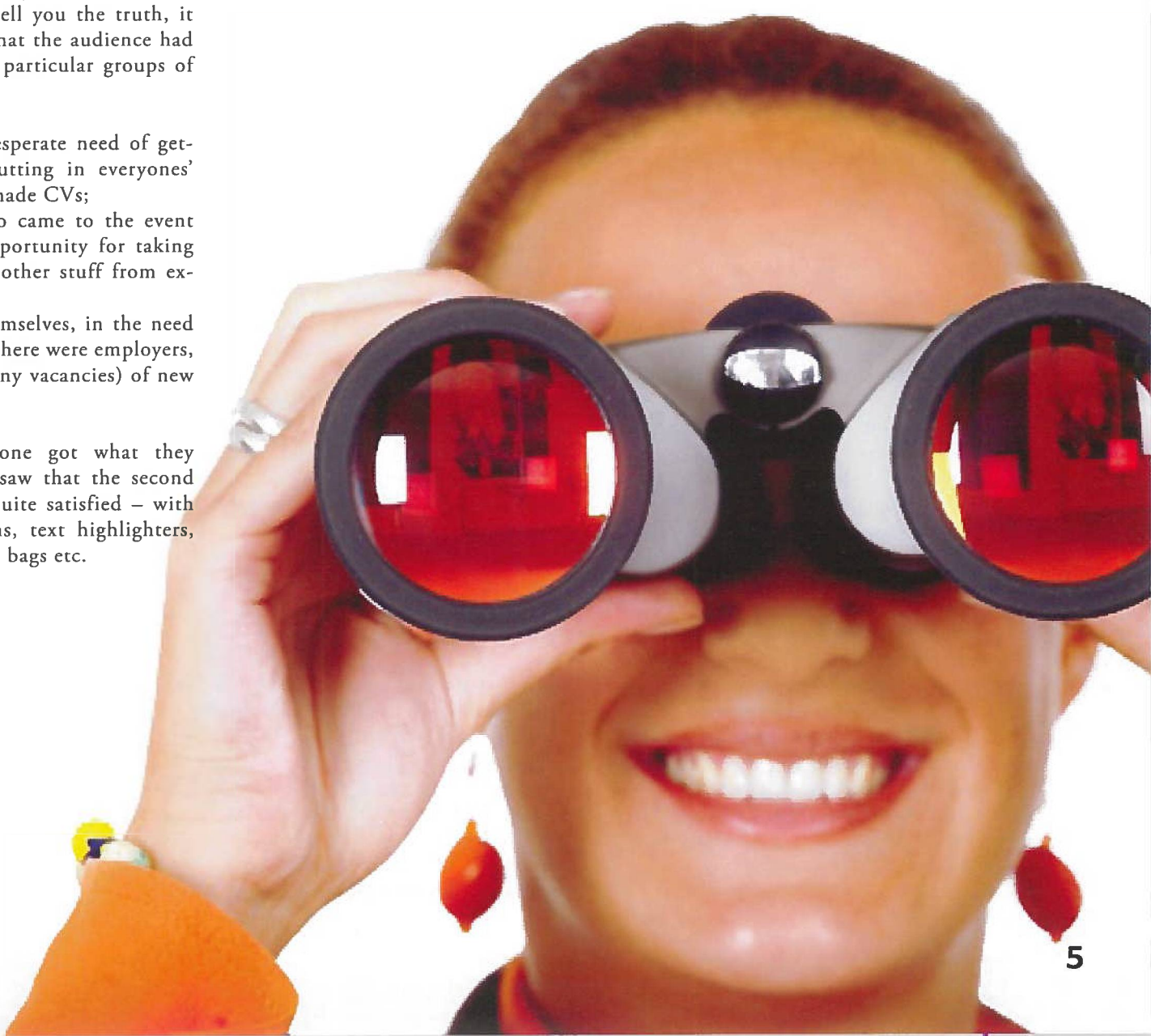
1. Students in the desperate need of getting a good job, putting in everyone's hands their perfect made CVs;
2. Also students, who came to the event mostly to get an opportunity for taking free food and some other stuff from exhibitors;
3. The exhibitors themselves, in the need (not that desperate, there were employers, who didn't provide any vacancies) of new workforce.

Summarizing: everyone got what they wanted. At least, I saw that the second group participants quite satisfied – with bags full of lipbalms, text highlighters, booklets, cups, other bags etc.

Yes, I may sound a bit prejudiced and ironic, although it is a part of reality, which took place on Arbeidslivsdagen. However my actual point in here is in the heading of this article – for people, who wanted to benefit in terms of career and manpower participating in this event, it was hugely profitable and useful to visit.

To be more precise, I also asked the employers, how do they reflect upon Arbeidslivsdagen and got some interesting results. For instance, Evelyn Blom-Dahl, the representative of Norsk Olje og Gas said, that majority of students, who came to her this day, were geology and engineer field interested and they asked for her

opinion as an expert about the future of oil and gas industry as it is a part of their future too. Marius Stamnes, the advisor of Kupa (Arctic Accelerator in the exhibition), explained, that his company took part in the exhibition mostly to attract students to internships they offer and explain, what the Arctic Accelerator is and what it is doing for the future of Northern Norway businesses. Compiling the conclusion of all the actual results of the Arbeidslivsdagen and my own feelings, I should conclude the following: university does the great thing to students (and not only them!), preparing such events, and let it be more often!



Let Academic English Be Your Bff And Become A Pro In It!

There is a writing centre in the HSL-building for helping with academic English required in documents or assignments during our two semesters. It has expanded since its start two years ago, but still serves only HSL faculty students. The expansion (from one person to four) shows the huge success of such a helpful service. However, other faculties are still in need of such a centre and should consider creating their own for their students and staff.

Contact: cathinka.d.hambro@uit.no + Torhild

Location: SVHUM A1026

Web: <http://uit.no/hsl/writingcentre> (will be updated soon)

See also: <http://sokogskriv.no/english/> and <http://site.uit.no/skriveverksted/>

Opening hours Autumn 2015:

o Tuesday 12.15 – 14:00 (Cathinka; SVHUM A1026)

o Wednesday 13.15 - 15.00 (Torhild; place to be announced shortly)

The lucky students of humanities, social studies, etc., have a place to go to if they are struggling with their English writing skills. Here they'll find Cathinka, a kind woman, who is ready to provide help with academic writing. When students and employees hand in their texts to her she can read them through thoroughly and give individual advice in person. Given enough time, she can read anything from short assignments to larger chapters of a thesis. Master students or academic staff can arrange meetings via e-mail or knock on her door any time, though there are recommended hours (see fact box). Since Cathinka is consulted quite often – especially during exam periods – the faculty announced another position which was recently filled by another woman – Torhild. For these two women, the writing centre represents a full-time job and as expected, exam time is always the busiest time. So there is big recommendation for sending required texts on time or better, before that period.

Basic mistakes appear as an example of not so careful self-proof-reading. In fact, the main reason for underrated grades for particular assignments is a lack of available means of idea expression. Considering the better learning outcome when people learn how to help themselves by improving their skills, the centre does not provide proof-reading. Therefore, the assistant will not correct the mistakes but instead will give advice on how to avoid them. (Find basic practical tips below)

This service is provided for MA and PhD students as well as academic employees. The Norwegian bachelor students are able to get similar help from Skriveverkstedet but unfortunately this writing centre will not be able to help people from other faculties besides HSL. However, others might get inspired and do little lobbying toward the creation of their own faculty writing centres. Meanwhile they can get some useful advice in recommended sources (see fact box).





12 Tips From Cathinka On How To Succeed With Academic Writing

1. Read the essay question(s) carefully: what are they asking you to do?
2. If you're not certain about how to understand the essay question(s), clarify how you interpret/understand the question(s)/assignment in your introduction.
3. Think through – and write down – everything you (think you) know about the topic for discussion. You will often realise that you know far more than you think. Almost as often you'll realise that what you «know» is based on more or less (sub)conscious prejudices.
4. Write an outline. This is a good way to organise your ideas and it makes it easier to structure your text.
5. The structure is the skeleton of your text. It holds the various elements (paragraphs/chapters) together. The structure of the text does not have to reflect the writing process. Sometimes it may be more practical to start with the body of the text and write the introduction towards the end. See what works best for you.
6. An academic paper should always consist of an introduction, a main body, and a conclusion/summary.
7. Use sub-headings to prepare the reader for what comes next. This makes the text easier to follow. Stick to the case and be critical of your own text. Try to put yourself in the reader's position.
8. Define and explain difficult terminology. This way you show the reader that you understand the terminology you're using and that you know how to apply it, and you make it easier for an outsider to follow your text.
9. Always give credit to your sources by way of references and quotations (not copying)! Copying others without quotation marks and references is plagiarism and is regarded as cheating. It may have serious consequences for your further studies at UiT.
10. The first impression counts! Before you submit your paper/thesis, read through it carefully and make sure that you have complete sentences, that you're consistent with your use of font and line spacing. Double check that your front page is informative and neat.
11. Don't be afraid to delete paragraphs or sentences that contain unnecessary information or repetitions. Sometimes you have to kill your darlings! Avoid long, complicated sentences. Use full stops frequently.
12. Swap your text with a fellow student before submitting and let others read and comment on your text. It may also be useful to discuss the essay topic with fellow students along the way.

TEXT: Anežka Prosecká, Johanna Schirra

Selling Ice Cream to the Eskimos

TEXT: Franziska Schäfer
PHOTOS: Private

The Englishman Alex Beeton runs the first ice cream business in Tromsø. Since 2014, he owns the company Funky Glaze and sells ice cream in summer and crêpes in winter on a bicycle. Why he came up with this crazy idea and is that successful today, he explained in a talk at Flow on Wednesday, 24th of August.

Imagine you were lying on a beach in Sardinia, with a view of the sea and the mountains, enjoying your ice cream. Why shouldn't you be able to experience the same in Tromsø? This is what Alex Beeton thought in 2014. In Tromsø there are mountains, there is a beach and since two years, there is ice cream, too. But the big difference is: Tromsø is located in the Arctic, while Sardinia is located in the Mediterranean region.

When Alex Beeton came from Cambridge to Tromsø in 2012, he initially worked as a dancing teacher. But soon he wanted to try something completely new, as he explained in his talk at *Flow*, a coworking and innovation space in Tromsø. Something crazy, creative and bold. "I chose a life in which my future is not written", he describes the way he lives and works. So

when he got the idea of selling ice cream in the Arctic, he decided to jump in at the deep end.

He started Funky Glaze although many people thought it would not work. Due to the Arctic climate it was likely that people would be more interested in buying waffles or hot beverages instead of ice cream. In order to overcome these concerns, he sought for professional advice. By talking to many different people, he strengthened his idea and figured out a business plan and a bicycle design. According to Alex Beeton, the most important thing is to "really put yourself in it, so other people can identify themselves with your vision." Moreover, when it comes to creativity, children are far superior to adults. "We don't grow into activity, we grow out of it", as the British author Sir Ken Robinson said. So why not



try to see the world through the eyes of a child or ask a child for advice? "School stigmatizes mistakes as being wrong", so Alex Beeton. "They teach you how to learn and work in one specific way only. This is why people feel at some point replaceable. People are individual and good at different things, therefore do not punish them for what they are."

Today, three years later, Alex Beeton has established his own seasonal business of selling ice cream in summer and crêpes in winter. Besides selling the products in person, he is currently working on different marketing campaigns. One of them is called the *Funky Glaze Challenge*: People involved in a local business have to eat some hot peppers. Afterwards they have to cope with the hot taste in their mouth and explain their business idea while the situation is filmed. The videos can be found on Facebook.

In fact, Alex Beeton succeeded with his crazy idea of selling ice cream in the Arctic. His success story is a great example of how regional business can work: through networking, creativity and courage.



Professor Of The Month – Gaute Hansen

TEXT and PHOTO:
Wilhelm Vold

Gaute Hansen is a true hero of every student who has him as professor. He is passionate and enthusiastic about his subject, and he makes sure that you will understand and learn it to get an “A” on the exam!



Every student is familiar with mornings at university; they can be harsh. You need at least 10 cups of coffee to stay awake at certain lectures. Gaute's lectures, however, are definitely not the case! This amazing man has been lecturing hopeless students since the 90s and is still going strong. His strong voice keeps you awake throughout the entire lecture; his lively explanations, even to complex parts of his subjects, will not leave you clueless at the end of his lectures.

Students' experiences show that the effect of the learning process decreases dramatically when the enormous amounts of information, which must be absorbed in a short amount of time, is a dry desert of terminology and information. Only a few would not be able to relate to the daunting feeling of reading a foreign language when you start with something completely new, with tons of details, such as atrocious biological cycles and processes! Even though, Gaute makes any class interesting and comprehensible – seldom without sneaking in some humour here and there, to hold students focused.

Utopia decided to pay a visit to Gaute Hansen to ask some questions and get to know him a little better. Upon entering his office, football flags were observed.

How did you end up in an academic profession?

I have always been interested in natural science and my father was biochemist. So, to start with, I was thinking about studying astrophysics, and I did start. However, after a while I found out that physics became too mathematical, too abstract. Therefore, I changed to chemistry and biochemistry and I liked it a lot! These subjects felt more logical to me.

How many students do you teach?

I teach many students; those who study medicine and odontology, biomedicine, biotechnology and nutrition. So, in total, it is around 220 students.

Was it difficult for you to become a professor?

It was a bit difficult to come to this academic profession, but I have an advice for young students: do take lecturing tasks when you have the possibility. I have taken this kind of tasks since I started studying my doctor degree. University then gave me more of these tasks, and after a while they had no choice but to employ me.

You were lecturing students since 90s. How do you manage to hold the enthusiasm high all this time?

I have to say that sometimes I'm not looking forward to start on a new semester. Not because of the lectures, I really like them, but because of the unbelievable amount of work. Nevertheless, it is always you, the students, that are to be thanked for my ongoing enthusiasm. As long as it is just a few students that are interested in learning – preferably more than one – something triggers in me and I am continuing on doing it with passion. So, my enthusiasm is something that will never stop being there because it will always be awakened by students.

Let us move away from the past. What is your hobby nowadays?

My biggest hobby is of course my two children. But, except that, I like to hold myself physically active – I play football.

A little piece of advice to students – do some sports occasionally. It will sound a bit paradoxical but after a good workout your brain will work much better.

Utopia is very grateful to Gaute for finding some time to answer our questions, and we hope he will continue to make students' days easier with his fantastic work.

Gadgets for Our Best Friend

TEXT: Yati Chen

Every dog owner knows what it takes to keep that tail wagging. From walking our four-legged friend to keeping it safe and clean, there is actually a lot of work and responsibilities when it comes to owning a dog. However, it all pays off once you see that your dog is happy and healthy, and with the help of technologies, taking care of your little friend can become much more enjoyable. Here is a list of gadgets that can make both you and your pooch's life easier.

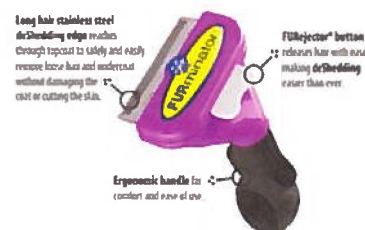
1. Push Pushi Raincoats.

Push Pushi proves that fashion is not just for human beings. By combining fashion and function, Push Pushi offers a wide variety of raincoats with different sizes, colors, and patterns. A detachable and convertible hood keeps your dog dry without flattening its ears. Choose the color or pattern that matches your own raincoat and sing in the rain with your best friend!



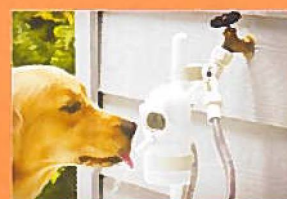
2. Furminator.

This simple looking brush will end your battle with your dog's shedding. Furminator reduces shedding by up to 90 percent by removing the loose, dead undercoat without damaging the topcoat or cutting the skin. It has the 'Furejector' button to release the hair after brushing, making it easier to deal with your dog's shedding. Furminator can also be used on cats - good news for cat lovers!



3. Waterdog.

While Pawcet requires pressing on a special pedal in order to provide water, Waterdog requires no effort from a dog to get a steady stream of fresh water. It is equipped with a sonar proximity sensor, which automatically turns on the fountain when your dog is near, and off when it walks away, exactly like our automatic water tap. Waterdog is powered by four C-cell batteries that can last up to one year.



4. Pawcet.

A paw-activated water fountain might look silly, but dog owners, whose dogs prefer drinking running water, will approve of this product. Pawcet can be easily attached to any water hose, making it a great outdoor hydration station for your dog. Water will shoot out continuously when a paw is pressing on the pedal and stop when a paw is removed. You will have to train your dog to use this fountain, but every dog will learn very quickly for this rewarding trick.



5. Leashpod.

Leashpod is more than just a leash - it is also both a trash bag dispenser a trash bin with attached freshener. This innovative leash makes your dog walking routine more enjoyable, since there is no more need to carry your dog's trash bag in one hand and hold the leash with the other. Especially when you go hiking with your pooch, Leashpod will help you hide that stinky bag until you come down from the mountain and find a trash bin.



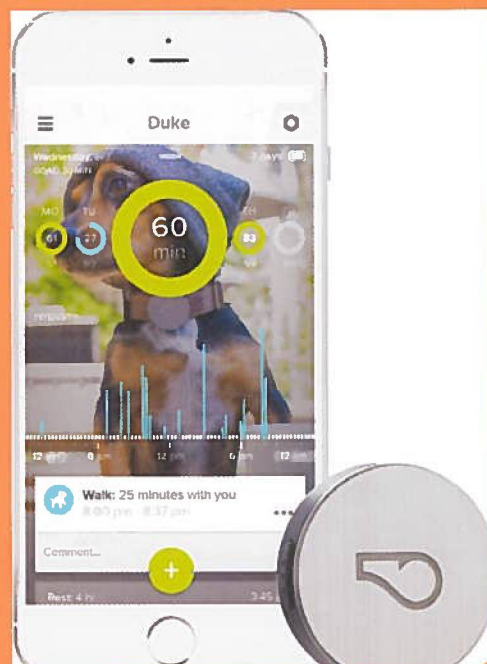
6. Dyson Groom.

"Groom. Suck. Gone" is the tagline of Dyson Groom. While other grooming brushes will leave you with a pile of hair after grooming, Dyson Groom eliminates the need for that extra cleaning. With the special grooming brush attached to the vacuum cleaner, you can now groom and clean at the same time. It also removes dead skin cells as well as loose hair, thus capturing allergens and stopping them from spreading around the home.



7. Whistle.

Whistle pet tracker is just like our fitness trackers with the only difference that the first one helps you track your dog's whereabouts and activities and even monitor its health. You can also add your family members and your dog's caretakers to monitor the dog together in a special app. Whistle's battery lasts ten days after having been fully charged. The Whistle is durable and waterproof, which are basic requirements for anything that is meant to be attached to a dog.



8. Anypotty.

Dealing with your dog's daily waste is the most unappealing aspect of owning a dog, especially indoors, and that is what Anypotty is created for. Anypotty is an automatic indoor dog toilet which manages both liquid and solid waste. It has an amazing mechanical function when it comes to managing solid waste. When your dog finishes its bowel movements, Anypotty's sensor starts to work after the dog leaves the toilet, and the grill flips open so the solid waste falls into the collection tray. No more stinky solid waste on the doggy toilet!



Conclusion.

There are countless pet gadgets available on the market nowadays, including automatic dog feeders and high-tech toys that enable us to leave our dogs home alone for a longer period of time. However, keep in mind that our presence and physical interaction with them are the most rewarding for them, and will never replace any toys or gadgets, not even the best high-tech one you can purchase. Take care of your little friends!

A Centurial Milestone – Verdensteatret

TEXT: Marc Legua Mira

PHOTO: www.verdensteatret.no

Easier said than done, a century is a measure of time that often fails to portrait the tremendous dimension of its signification whenever the word is mentioned in quick day-to-day conversations. That is precisely what might happen when walking by the iconic *verdensteatret* in Tromsø sentrum and noting how it just turned a hundred years old, hitting a cultural milestone that, on top of the already impressive evidence of longevity it represents, conveys a great deal of art, beauty and history for the city. So it is well worth it to pause and ponder the beauty of this institution at the core of Tromsø's enriching history.

At Storgata 93 B, Tromsø sentrum, *Verdensteatret* rises its inviting facade with an enrapturing aura of intellectual melancholy, consolidating itself as a unique piece of architectural memorabilia with a buzzing contemporary heartbeat flowing through its windows. But it's not here that we've been taken to on this day – despite the unmistakable magnetic atmosphere warping the halls – but rather Tromsø's public library hall which, not far from there, offers the perfect setting to honor such a memorable landmark for this institution.

At the uppermost floor of the library, guests gather around the array of chairs that have been lain before the vast glass windows facing Tromsø's coastline, a gloomy yet picturesque image hugged by the ever-present fjords which, at this hour, appear wrapped in a somewhat mystic mantle of clouds that have yet again wandered too low from the skies. Among the guests appear notable figures such as the mayor of Tromsø and Jone Lein, manager of the *Verdensteatret* itself, making a clear statement of solemnity for the celebration with their attendance - this is no mere low-profile cultural gathering, but rather an iconic day for both the city and its citizens, whether they choose to acknowledge it or not.

Between the window and the chairs, a projection screen dominates the room, anticipating the central piece of the event. Beside it lies also a beautiful wooden pia-

no ready to play along once the screening begins. For this purpose walks the room Ben Model, an accomplished silent film pianist and resident film accompanist at the Museum of Modern Art (NY) and at the Library of Congress' Packard Campus Theatre, in the US. Being one of the leading silent film accompanists in the nation, Ben's mastery soon becomes obvious once the lights have been dimmed and our attention is directed, fully this time, to the big screen.

“Ask father”

At twenty-two years of age, I have very seldom stumbled upon silent cinema myself aside from the occasional Charlie Chaplin movies back in my high school days. Nevertheless, the medium does not feel unfamiliar to me, and I am gladly surprised at how quickly I am picking up the plot despite the absence of dialogue and the undeniable hyperbolic twist to the actors' gestures. It is exactly then that I am struck by a shocking, though obvious realization: The movie is indeed silent. Completely silent, lacking any soundtrack whatsoever. In my nervous ignorance, I had failed to note how Ben's performance was adding all of the sounds we were experiencing in real time, and it was not until a couple of minutes into the movie that I turned my eyes – and my gape – towards him and the piano. This point needs to be stressed because (and to some extent in my defense) it comes to show how the level of synchronization was just amazing, making it very hard to tell how the sounds were detached from the media.

Stolen from us in a professional rhythmic frenzy, the artist kept playing simultaneously as the plot progressed and unfolded, alternating his look between the screen and the keys in order to match the mood of the characters to perfection.

“Ask father” is a short movie by the Company “Pathé Exchange inc.”, portraying the tale of a young and handsome man

trying to marry a beautiful lady, whose number of suitors is equaled only by the bad temper of her father.

Full of both humor and woes, the movie relies entirely on the score in order to communicate the characters' feelings to the audience, and when all of us are giggling as our main character is rejected again and again, enduring all manners of miseries and coming up with unexpectedly clever comebacks, one can only acknowledge how playing music for silent movies is truly a form of modern art. The way in which the sounds vertebrate the development of the plot, driving the feelings and eliciting empathy, pity, and all the array of emotions that might spin from a movie scene, has a special way of teaching about the power music has as a medium to communicate as a language in itself. Moreover, at the sight of Ben's uninterrupted playing (it is a rather agitated melody, full of allegros and fortes) it is impossible to help being amused by the effort that comes with playing along for such lengths of time back in the old days of *Verdensteatret*, how difficult it must have been for the orchestra and the artists to perform for so many hours during a regular business day a hundred years ago when it all started!

Once the projection has ended, there is time for small talk and networking, while a guide leads those interested to the exhibitions hanged on the walls at the back of the room, where pictures and story about *Verdensteatret* are displayed in a classic museum layout. It is very beautiful to see so many people engaged in culture coming together in such a relaxed and charming context, all of them showing respect and admiration. It is mostly mature people attending the event, but there is also young faces to be spotted among the crowd, mostly with an expression of curiosity in the face of everything we have been witnessing. This must definitely be great news for the projection of the institution and its prevalence, which is precisely the main topic concerning our interview with

Jone Lein, the manager at Verdensteatret who was more than willing to talk with us as we drew near closing time.

What does it mean for the city of Tromsø to see this institution turning a hundred years old?

I think it makes us understand culture has been an important part of the city for a very long time. I think it gives us a perspective on how long the city has been a cultural place because this is one of the oldest cinemas in Norway and sometimes we think that being a cultural city is a new phenomena for Tromsø, but when we have this city and we get to learn about the history of the cinema, it tells us –and me- that what we are doing now is not very unique, because we have been doing things for a hundred years and it gives the city a depth, sort of.

You have just hit the 100 years milestone. What do you think are the biggest challenges that Verdensteatret will be facing from now on?

Becoming more international, because my goal is that Verdensteatret should be a pla-

ce for everyone, which means that it has to be also not only for Norwegians or people that can walk, like one of the projects that I am working on now is making it possible for people in wheelchairs and carrying babies, people who cannot Access the stairs, to make it possible for them to go into the cinema, so that we can reach the goal of becoming a place for everyone.

Also, it is nice when you have a birthday and become a hundred years old to look back, but it is also important to look forward, and one of the things that we want to do for the next hundred years is making Verdensteatret more international. My vision is that we want to have all of the movies that are in Norwegian with English subtitles, we want to have the whole webpage in English and all this kinds of things to make it more accessible. These are all things that we are wishing for as birthday gifts, because we don't have money for it, so you could say that all of our birthday wishes have to do with becoming more international.

Is it a private run institution?

No, it is run by the film festival, it's a charity foundation so something in between. One third of our money comes from tickets sold to the audience, one third from sponsors and one third from the government.

What is the day-to-day reality of Verdensteatret nowadays? Do you Project contemporary movies, classics, etc.?

Yeah, we Project contemporary movies and classics, so it's a cinematek, so we can show movies in all the different formats. We show the classics in our archive and we also show new films, it's a curated movie theater so the movies that we think are good and fit in the theater we screen them. We also have concerts, debates or if you want to call us and say that you want to put up a movie, then you are in charge of the screening and the arrangement (inviting people and so on), we do that all the time!

I think this might be very interesting for our readers, are there any additional conditions in order to screen a movie there?

Well as long as I am able to acquire the rights for screening the movie there is no problem whatsoever. I get the money from the tickets, of course, (as it is something that you do voluntarily) and as long as it is a good movie and you can debate with me why it is important / interesting to put it up and stand for it, there is no problem at all!



Teleportation-

Transporting Ourselves To Different Places Instantly

TEXT: Rajwinder Singh

PHOTO: Wikimedia Commons

We get amazed when a magician plays tricks like pulling out a rabbit from an empty hat or coin from someone's ear etc. They can even make an aeroplane disappear within fraction of a second (a trick which is actually performed with the help of mirrors). Now imagine: what if we could disappear from one place and reappear at a different place instantly? The consequences would change the whole world. We would not require any mode of transportation like trains or planes. Earth would become heaven for couples in long distance relationships. Going on a holiday would become a lot easier and cheaper. Besides its advantages there would be some disadvantages as well. Criminals can disappear after committing a crime. The Army would be able to penetrate enemy lines without being noticed.

Teleportation is the ability to transport a person or an object instantly from one place to another without traversing the distance between those places. It has been a part of science fictions for many decades. But, is teleportation possible? If so, what is the science behind it? How far are we in creating such a technology? The answers to these questions lie in Quantum physics and in this article I will try to answer them.

Quantum world-where common sense breaks down!

Quantum physics describes the nature and interaction of particles at atomic and sub atomic level. We all are familiar with Newton from our high schools. Newton's three laws in physics were the foundation of physics before quantum physics was formulated. According to Newton matter around us is made up of tiny hard particles. These particles can't change their motion unless a force is applied on them. They can't suddenly disappear and reappear at a different



place. Hence in classical physics, which is based on Newton's laws, teleportation is impossible.

Quantum physics tells us that there is no such thing as particle or a wave. The concept of wave-particle duality in Quantum physics states that a particle e.g. electron can act as waves and waves e.g. light (which is a form of electromagnetic waves) can act as particles called photons. So in other words we can also say that light beam is a train of particles called photons. There are many experiments that confirm this phenomenon. Now the question is, if there are waves associated with particles, what are these waves? The answer is 'Probability Waves'. To understand that we need to know Heisenberg's uncertainty principle.

There is a famous joke on Quantum physicists which is as follows: 'Quantum physicists are bad at sex, as when they find a spot they don't have proper momentum and when they have momentum they can't find a spot. You can only understand this joke if you know what the uncertainty principle states. We will understand this principle by a simple example. To find the speed of a tennis ball in a dark room we could take two flashbulb photographs, measure the distance the ball travels between the

photos, the time between them, and calculate "distance/time = speed". When we take a photograph, some flashbulb photons (particles of light which we discussed in the paragraph above) hit the ball (which reflects them back to the camera film) and a tiny amount of photon momentum is transferred to the ball. But the ball's mass is so large that this momentum doesn't have a significant effect on the ball's motion.

Now imagine the same experiment but instead of a ball you have an electron which is about a Trillion times lighter than the ball. When hitting the ball, the photon will change the motion of an electron in a significant and unpredictable way. These limitations are imposed by nature, not by a lack of technology or cleverness. No matter how carefully we build measuring instruments and plan experiments, we cannot make measurements that are more precise than is allowed by the uncertainty principle. According to this principle, neither the exact position, nor the exact velocity of a particle can be measured simultaneously.

The consequence of this principle is that when we measure a certain particle, there is always a probability of finding a particle at some position, as we don't exactly know where the particles posi-

on is. This probability of finding a particle in a region of space is described by the mathematical function called 'wave function'. The larger the amplitude of a wave function is, the higher is the probability of finding the particle at that point. In short it means that there is a probability that an electron will be in many places at the same time. The concept of probabilities in quantum physics breaks all the laws of common sense, but this is how the nature works at nano level.

Teleportation using Quantum Entanglement

Imagine two electrons vibrating in unison (a state called coherence). If we take one of them as far away as billions of kilometres, they will still remain in unison. It seems like there is an invisible connection between the two electrons. If something happens to one electron, the information is immediately transferred to the other. This phenomenon of particles vibrating is known as quantum entanglement.

Electrons have two types of spins, clockwise and anti-clockwise. We denote clockwise spin as +1 state and anticlockwise as -1 state. If we have a

system of two coherent electrons with opposite spins, then the total spin of system will be $+1-1=zero$. Now we take them apart and make a measurement on one of the electrons to measure the spin. If this electron has a clockwise spin, we would know for sure that the other electron has anticlockwise spin and vice versa. In fact, you know this faster than the speed of light!

In teleportation experiments physicists start with two atoms, A and C. Let's say we wish to teleport information from atom A to atom C. We begin by introducing a third atom, B, which starts out being entangled with C, so B and C are coherent. Now atom A comes in contact with atom B. A scans B, so that the information content of atom A is transferred to atom B. A and B become entangled in the process. But since B and C were originally entangled, the information within A has now been transferred to atom C. In conclusion, atom A has now been teleported into atom C, that is, the information content of A is now identical to that of C. Notice that the information within atom A has been destroyed (so we don't have two copies after the teleportation). This means that anyone being hypothetically teleported would die in the process. But the information content of his body would ap-

pear elsewhere. Notice also that atom A did not move to the position of atom C. On the contrary, it is the information within A (e.g., its spin) that has been transferred to C.

Can teleportation become a reality?

In 2004, physicists were able to teleport an atom from one place to another. In 2006 yet another advancement was made, for the first time involving a macroscopic object. Physicists at the Niels Bohr Institute in Copenhagen and the Max Planck Institute in Germany were able to entangle a light beam with a gas of cesium atoms. Then they encoded information contained inside laser pulses and were able to teleport this information to the cesium atoms over a distance of about half a meter. In conclusion teleportation exists at the atomic level, and we may eventually teleport complex and even organic molecules within a few decades. But teleporting a human being is a very complex task as the amount of information to be transferred from one place to another is tremendous. We might have to wait for centuries for this to happen even if it is allowed by the laws of physics.



Why Italy shakes

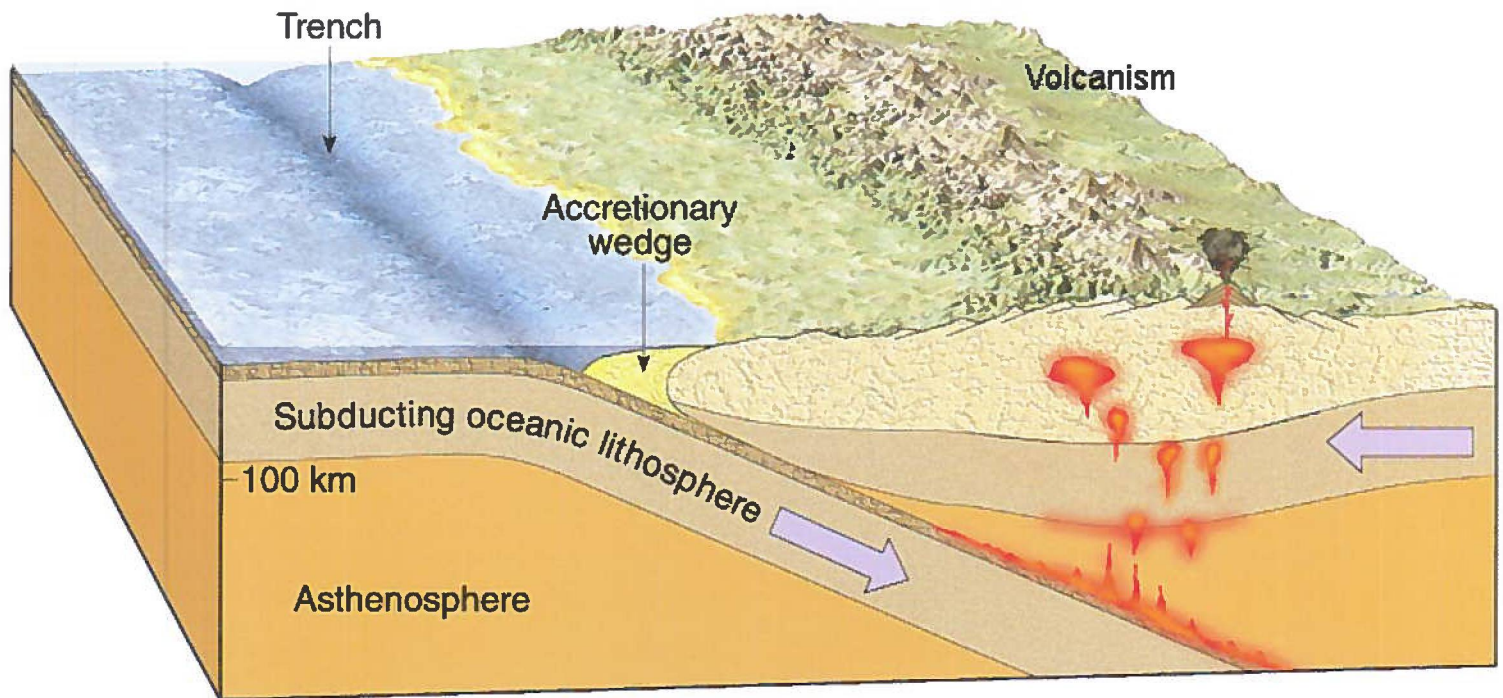


Figure 1: Process of subduction

Italy is, seismologically speaking, one of the most active countries in Europe. The fourteen volcanoes, of which four are still active, and many earthquakes do proof that. The 6.2 magnitude earthquake of the 24th of August, still lingers in everybody's head. But why is it that the earth shakes this often in Italy? And if it happens that much, couldn't we have known an earthquake would reoccur?

TEXT: Flore Van Maldeghem

Geological Italy

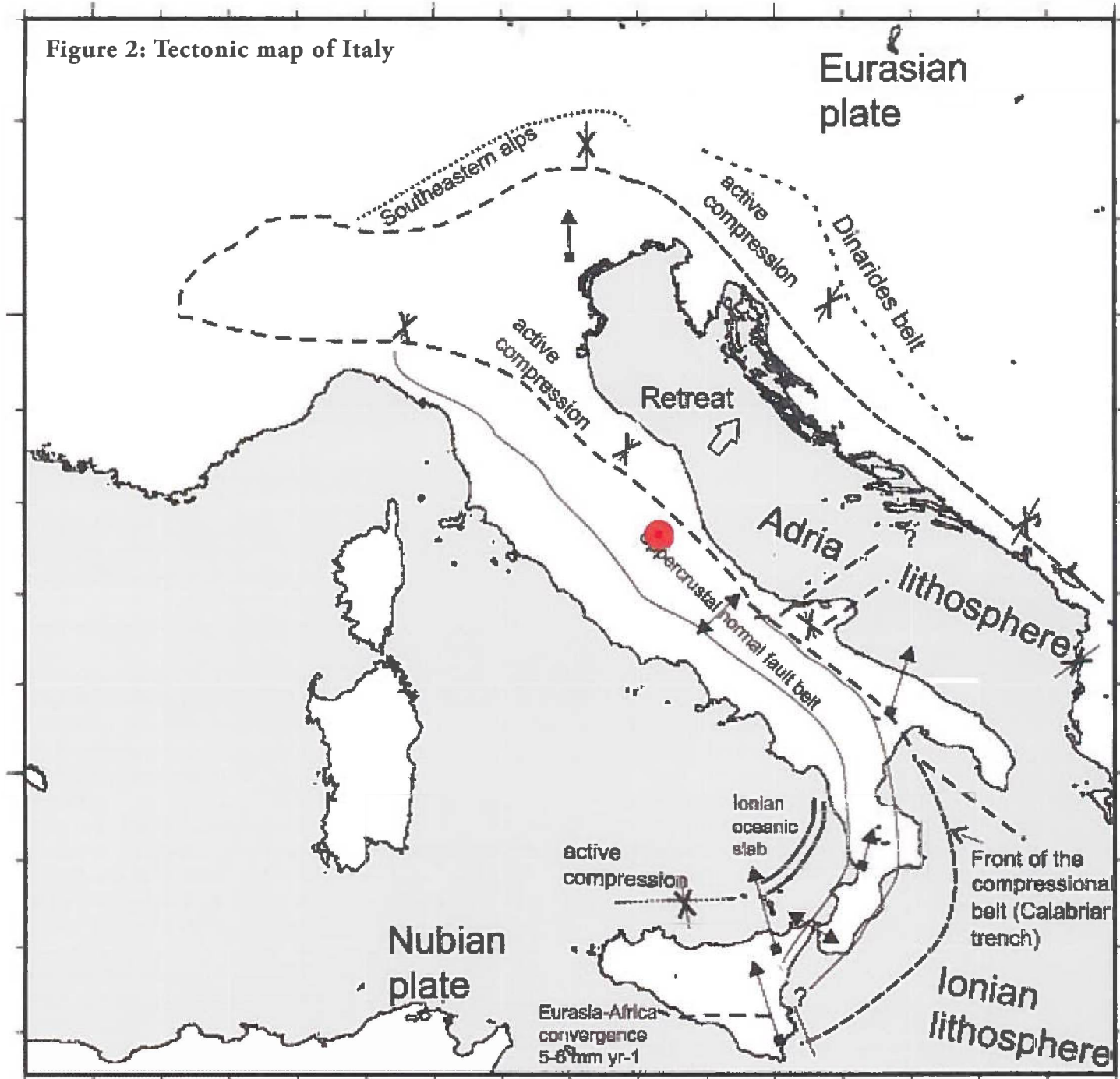
In order to understand why there are so many earthquakes in Italy, we have to take a closer look at Italy's geological situation. There are three main causes for the tensions prevailing in the area. First of all, the country's geographical position is right on top of the border between the Nubia plate (Africa) and the Eurasian plate. These are tectonic plates: giant slabs of rock, making up the earth's upper crust or lithosphere, which can move on a viscous layer, called the asthenosphere. At the boarder of these two tectonic plates, a process called subduction has been taking place for approximately 50 million years. In other words, the African plate slowly dives underneath the Eurasian plate in the asthenosphere. This process is responsible for the building of the alpine mountain belt, the formation of the Apennines (i.e. the accretionary wedge) and the volcanism in the country. To complicate things even further, there is a second cause which needs to be taken into account: the subduction of another plate, the Adria micro-plate underneath Eurasia and the Apennines. Finally, we also have to consider the opening of the Tyrrhenian

basin to the West, which initiates stress on the area. The expression of all these different tectonic styles, present at the same time in a broad region, leads to the formation of some complex fault systems in the Apennines (figure 2).

The slip

In order to understand why earthquakes do occur, we first have to clarify what an earthquake is. An earthquake is the shaking of the surface of the earth, resulting from the sudden release of energy in the earth's crust. At a fault two blocks of rock move along each other. However, the movement is not constant, because the surfaces of these rocks are not perfectly smooth. If there is a bump on one of the surfaces, the movement can stop, but the tension will keep building up. At a certain moment, the tension reaches a maximum, the bump breaks, the block can slip through and the energy that triggers the earthquake is released (figure 3). This is what happened in Italy at the 24th of August at 3:36 am.

Figure 2: Tectonic map of Italy



Could it have been predicted?

Italy is known for its many earthquakes. The previous severe earthquake happened 2009 in l'Aquila, only 50 km away from the epicentre of the earthquake at the 24th of August. These two events can be linked to each other, because they were triggered in the same fault system. You can split up one fault system into different segments. Each segment is activated separately, and under normal conditions they get activated chronologically. Segment 1 releases its energy and initiates stress on segment 2. When segment 2 releases its energy, it will initiate stress on segment 3 and so on. Therefore, it is very likely that the segment which was activated during the 2009 earthquake, put stress on the segment activated in August 2016. This tension can be measured. Hence, in a way, scientists already knew that an earthquake was about to happen. However, it is impossible to exactly calculate when and where the earthquake will occur. And that is what people want to know. So yes, we knew an earthquake would happen. But no, we could not pinpoint the exact date and place.

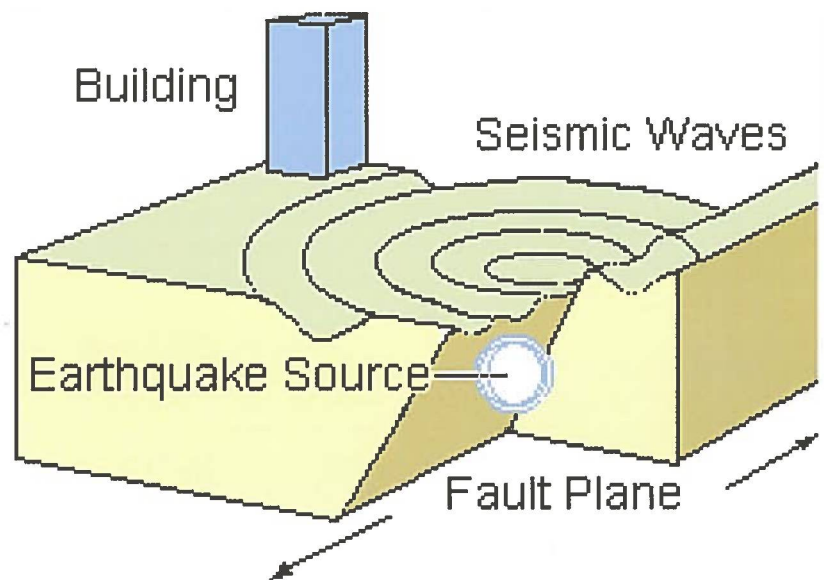


Figure 2: Figure 3 Trigger of an earthquake

Notes
to self ♡

Tromsø 2016

Dear Travel-Diary,

This is Johanna writing. I just started my first weeks of my exchange Semester at the UiT – The Arctic University of Tromsø. And would like you to support me memorizing my experiences.

When it comes to the question of taking part in an exchange program people might come up with two positive ideas of it. The careerists may argue that, even if you might lose half a year in your CV, you might on the other hand be benefited on the job market later. Because it will be appreciated that you had been keen enough to take this step and you may have developed more cross-cultural competences than your competitors. The more esoteric people might say that leaving your comfort zone and head off to a foreign country all on your own is a great way to find yourself.

So now here I am in Tromsø as an exchange student for none of those reasons. First of all I decided to come because I woke up one day realising I want to go to Norway! Second because my Institute offers two studentships each semester for this University here in the far North. This is actually a funny thing because I am doing German Studies and as it appears they do not teach any German in Tromsø. Nonetheless I decided to spend a semester in Tromsø to broaden my mind.

So now that I am here and started to settle, I wonder about what kind of effects these upcoming months may have upon myself. Some people – even some of my friends – believe that I might come back home as a totally different person as the one I've been when leaving my hometown. And although I would not completely agree on this idea I can't deny that I expect some changes to happen. And for those changes I want to hold on to this diary/blog/logbook-thing. Continuing to write about my expectations and experiences I hope to finally create a picture of the influences of my journey to different aspects of my personality and skills.

So let's start with a list of my personal expectations:

1. Improvement of English language skills (written and spoken)
2. Acquisition of a new language (obviously Norwegian)
3. Cross-cultural experiences (getting to know different nationalities, dive into arctic culture)
4. Leaving the famous comfort zone and grab awesome experiences by this!

Since this is now my third week in Tromsø, some of these points have already been scratched. But all of these things are ongoing processes and so we will have to wait and see what happens. Reading these reports later might give an overview of the further development of these things. As for example (hopefully) in my written English skills. So far I can tell that I definitely started to use more English in everyday life. Though this might be obsolete to mention I have to say that there are so many German exchange students that it might be possible to get along quite well with speaking German. I also started learning Norwegian. There is this sweet open minded church community, who invited all new students to have homemade dinners during the first weeks of the semester. They also have a Norsk kafé every second week that I started to attend. Only by listening to the church members and trying to repeat some phrases I already felt to improve my sense for this new language. Of course there are also a lot of similarities to German, so that it might not be too complicated for me to learn Norwegian.

In the first days in Tromsø I went hiking, camped in the open nature and made myself talk to a lot of different people. So maybe the "leaving the comfort zone"-idea is already starting to take place. Until now I feel really good living in Tromsø. I met a lot of wonderful and outgoing people and everyone from Tromsø I talked to welcomed me heartily here.

So far for the first month. Let's see what experiences September is going to offer!

Greetings, Johanna



Er du skikket til yrket ditt?

Mange studenter må ikke bare ha den faglige kompetansen som kreves for sitt yrke; de må også være skikket. Flere studier som tilbys ved UiT er underlagt forskrift om skikkethetsvurdering i høyere utdanning, noe som medfører at det under hele studiet gjøres en løpende vurdering av om studentene er skikket til yrket. Men hva er egentlig en skikkethetsvurdering og hva skjer hvis noen mener en student ikke er skikket?

TEKST: Torill Varberg

Hva er en skikkethetsvurdering?

Kunnskapsdepartementet har i forskrift om skikkethetsvurdering i høyere utdanning fastsatt hvilke utdanninger som er omfattet av skikkethetsvurdering. Formålet med denne vurderingen er å avdekke om studenten har de nødvendige forutsetninger, om studenten er egnet eller ikke, for å kunne utøve yrket. Denne vurderingen foretas for å beskytte andres liv, fysiske og psykiske helse, rettigheter og sikkerhet til de pasienter, brukere, barnehagebarn, elever eller andre som studenten vil komme i kontakt med under praksisstudiet eller under fremtidig yrkesutøvelse.

I skikkethetsvurderingen søker man å finne ut om studenten utgjør «en mulig fare» for de nevnte gruppene. Skikkethetsforskriften §§ 3 og 4 oppgir noen generelle kriterier for de ulike yrkesgruppene som skal tas hensyn til i selve vurderingen, og disse suppleres med kvalifisert, faglig og yrkesmessig skjønn.

Som hovedregel vil de forholdene som er gjenstand for vurderingen knytte seg til selve studiesituasjonen, altså den teoretiske og praktiske undervisningen. Men dersom det foreligger forhold utenfor studiesituasjonen, vektlegges disse dersom de har, eller må antas å kunne ha, innvirkning på hvordan studenten vil utføre oppgaver i yrket.

Når foretas skikkethetsvurderingen?

Etter lov om universiteter og høyskoler § 4-10 (1) skal skikkethetsvurderingen foregå gjennom hele studiet. Så dersom du studerer et av studiene som er omfattet av forskriften, skal instituttet ditt foreta en løpende helhetsvurdering av dine faglige og personlige forutsetninger for å kunne fungere innenfor læreryrket eller som helse- eller sosialpersonell. Vurderingen er knyttet til ordinær studentoppfølging gjennom undervisning, praksis, veiledning, studentsamtaler og eksamen.

Hva er en særskilt skikkethetsvurdering?

Hvis det er begrunnet tvil om en student er skikket, skal det foretas det som kalles en særskilt skikkethetsvurdering. Særskilt skikkethetsvurdering benyttes bare i spesielle tilfeller der andre formelle og uformelle tiltak ikke har ført til endringer i studentens adferd.

Denne vurderingen begynner med at noen sender inn en tvilsmelding til institusjonsansvarlig for skikkethetsvurderingen av studenter ved UiT. Alle som har kontakt med studenter på de aktuelle utdanningen, enten det er andre studenter, lærere, praksisplassen, administrativt ansatte eller andre, kan levere tvilsmelding. Men tvilsmeldingen må være begrunnet, den kan ikke leveres anonymt og den som leverer meldingen har ikke krav på innsyn i saken.

Hva skjer hvis noen sender tvilsmelding om meg?

Når det kommer inn en tvilsmelding utreder institusjonsansvarlig saken og varsler deg skriftlig om tvilsmeldingen. Det er institusjonsansvarlig som skal sørge for at saken er så godt opplyst som mulig og du kalles derfor inn til en vurderingssamtale.

Hvis du ønsker det, kan du ha med en person på møtet. Formålet med møtet er å finne ut av hva som ligger i tvilsmeldingen, og å gjøre en vurdering av om du er skikket eller eventuelt om du kan bli det. De fleste velger derfor å ha med seg noen som kjenner dem godt og som kjenner studiet. Det kan for eksempel være en medstudent, en tillitsvalgt eller en annen man stoler på og som kan være en støtte i samtalen.

Fra vurderingssamtalen skal det lages skriftlig referat, som inneholder en beskrivelse av saksforholdet og eventuelle planer for utvidet oppfølging og veiledning. Det kommer an på den aktuelle saken hva som skjer videre, men som regel finner man en løsning og studenten får hjelp til å bli skikket for yrket og kan fortsetter studiet. I andre tilfeller bytter studenten utdanning. Men hvis den planlagte oppfølgingen og veiledningen ikke medfører nødvendig endring og utvikling hos studenten, skal saken fremmes for universitetets skikkethetsnemnd.

Når åpnes det sak for skikkethetsnemnda?

Når institusjonsansvarlig har fremmet saken, forbereder Avdeling for utdanning den for skikkethetsnemnda og sender forhåndsvarsel til studenten. Varslet skal inneholde informasjon om saksgang, studentens rettigheter og gi studenten en frist til å legge frem sine synspunkter i saken. Fra og med dette trinnet i saksgangen har studenten rett til å få dekket nødvendige advokatutgifter av universitetet.

Nemnda behandler saken i møte og fremmer innstilling til universitetets klagenemnd med en vurdering av hvorvidt studenten er skikket eller ikke, og om studenten bør utestenges helt eller delvis fra utdanningen. Studenten skal ikke utestenges for en lengre periode enn det som anses nødvendig i forhold til årsaken til at studenten ikke er skikket, men ved utestenging kan man ikke studere det samme faget på andre utdanningsinstitusjoner i Norge under utestengelsesperioden. Ved kortere utestenging kan det stilles vilkår som må være oppfylt for at utdanningen kan gjenopptas.

Er studiet ditt underlagt skikkethetsvurderingen?

Om så anbefaler jeg deg å lese kriteriene i skikkethetsforskriften. Mer informasjon, samt kontaktinformasjon til institusjonsansvarlig og kontaktpersoner, finner du på UiT.no.

Ønsker du veiledning fra en nøytral, uavhengig og konfidensiell instans i forbindelse med en skikkethets sak, eller har du spørsmål om hvordan du går frem for å sende en tvilsmelding, kontakt meg gjerne.

Skeletons on Svalbard

Summer excavations of whalers' graves in Svalbard reveal blackened bones and blonde hair

The characterful red building that has housed the Polarmuseet since 1978 began its life in 1830 as a bonded warehouse. The original beams of its wooden ceilings are now rubber-padded – they're low, low enough to reward someone as short as me with the treat of ducking down – and the rooms have been filled with polar artefacts ranging from a restored trapper's cabin to dioramas, maps, diaries and weapons. And a bear on its hind legs carrying a log.

At the back of "ROOM 2" of the museum is the grave and skeleton of a young man. We know this man was a whaler in Svalbard in the seventeenth century. He was excavated at Likneset, a burial site with

more than 220 graves on the northernmost coast of Spitsbergen, in 1990. Last month a team of archaeologists returned to Likneset to excavate three more men.

Men travelled to Svalbard from continental Europe in the seventeenth century to hunt whales. The whales, most often bow-head whales, would be killed and then the blubber boiled into oil for export home. It was a dangerous business as men fought the cold, poor diet and the occasional *isbjørn*. Some, not surprisingly, did not return to mainland Europe to realise their profits.

I spoke with Arild Skjæveland Vivås, an archaeologist at Stavanger Maritime Mu-

seum and part of last month's four-person excavating team. Likneset translates as "corpse point", and he told me "*Likneset is not associated with any other activity than the graves, and there are other places close by with better ports*". I asked him why the community chose Likneset as their burial site. Perhaps, he said, the whalers sought a burial site away from their other daily activities. Alternatively, the site is visible from the high seas so it may have been chosen to remind the whalers of the perils they faced. More prosaically, perhaps nearby burial sites (of which there are a few) were for the exclusive use of whalers from other nationalities or trade houses and these whalers were pushed to the headland.

TEXT: Glen Jeffries

PHOTOS: Martin Bjørnplass (left), Arild S. Vivås, Sysseimannen (right)





The whalers' corpses on Svalbard are unique because the cold and dry conditions have largely preserved their skeletons and clothes. This, Arild wrote in his blog of the trip, means that: "*nowhere else in the world is [there] such well-preserved clothing [worn] by 'ordinary Europeans' from this period*". The excavations teach archaeologists and historians about the textiles, materials and trade networks available to 'ordinary' folk in seventeenth century Europe. It is strange to think that these daring men are not to be remembered for their hunting but rather the ordinariness of their fashion. It's the equivalent of today's Mars explorers being lauded in 300 years for their Norrøna knitwear.

So what did Arild and his team find this time? In one of the graves the deceased had been caringly laid on sawdust. His skeleton revealed the tell-tale signs of scurvy – bones blackened at the joints – similarly found in the earlier excavations. However, in those earlier excavations "*many of the skeletons were found with hats pulled down over their heads or other types of fabric that cover the face*". There was a widely-held belief in Europe at the time that seeing the

eyes of the dead would result in one's own death within the next year. This man had blonde hair and no such hat. The remains of a wooden crucifix marked the head of the grave. There were also the "*characteristic cairns*" placed by the whalers atop the soil to protect the grave from being looted by hungry polar bears and foxes. The cairns at Likneset and other Svalbard burial sites vary significantly in size from grave to grave, and Arild considers whether this may have been a reflection of different cultures, a sign of particular respect for an important person or an indication of the number of persons buried in a designated grave. In any case, the image of a wintry headland at the top of the world speckled by crucifixes and cairns is a chastening one.

And as ever with the Arctic, there is a global warming angle here. The team had been monitoring the site since 1998 and decided these graves were soon to be lost to the erosion of the beach ridge. These three graves were excavated because they were threatened by the rising sea.

So who is this man? More answers, Arild

says, will likely be found when a fuller excavation of his skeleton happens in the fall. He – the skeleton, not Arild – has been helicoptered to the Svalbard Museum to await such a fate. A scientific report following the earlier excavations concluded that: "*[t]he Likneset skeletons, however, differed from the other [skeletons found on Svalbard] in the presence of certain congenital and hereditary traits and anomalies*". The theory, then, is that the men buried at Likneset are all biologically related and derive from the same geographical area.

Arild has created a 3D model of one of the graves and an aerial photograph of the Likneset site taken from a drone (available here: <http://bit.ly/2bmmNzX>) so those interested do not need to venture to Svalbard to see the blackened bones and blonde hair. And next time you go to the Polarmuseet (entry is free for UiT students!) remember that the skeleton of the Arctic whaler you look down on at the back of "ROOM 2" is not only likely the relative of a seventeenth century man who just experienced a helicopter ride but also one of Arctic archaeology's most important fashion icons.

Modern Norway— The Environmentally Friendly, Conservation Minded, Global Leader In **Killing Whales**

TEXT: Adam Andrews

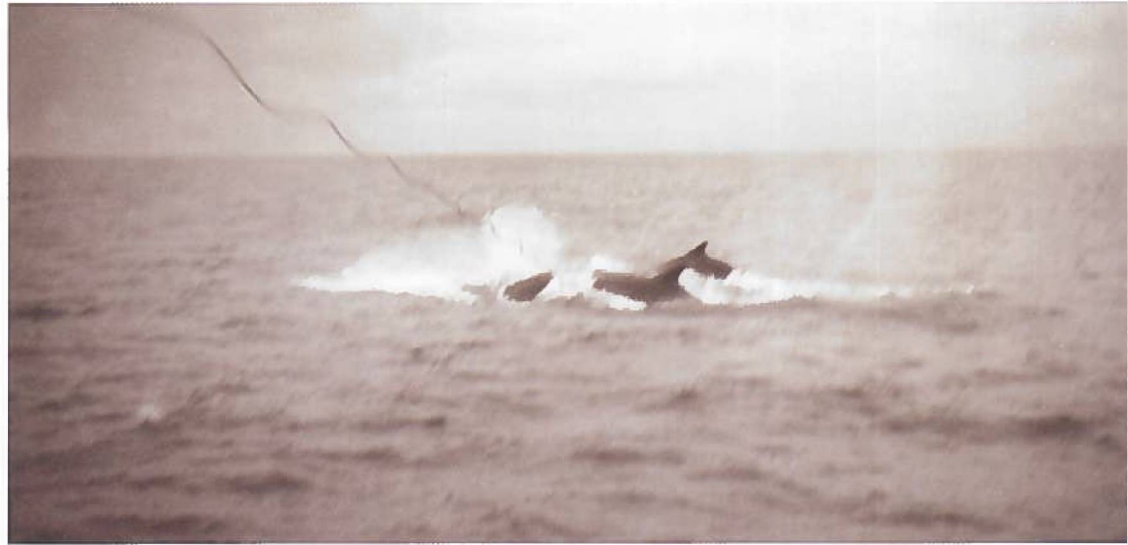
PHOTO: Wikimedia Commons

If you think that title is something of an oxymoron, you'd be correct. Norway has some of Europe's most pristine environments and some of its most spectacular wildlife, yet, the numbers of whales caught each year is increasing—something that shocks and confuses many Norwegians and Internationals alike.

My question is, can the industry really be booming if Norwegians aren't supportive of the practice? In truth, fewer than 5% of Norwegians regularly eat whale meat, and when they do its less than 0.25kg per person, per year (Altherr et al. 2016). In addition, Norway continues to fail in its quest to lift the CITES ban on international trading, therefore, its export opportunities are limited. Despite this, 2014 and 2015 saw Norway kill more whales (1,389) than Japan (780) and Iceland (345) combined (WDC, 2016), maintaining its position as the globes leading whaler, as these three nations are the only nations which still hunt whales commercially.

One result of this is our ability to walk into any supermarket and have the option to purchase whale meat for cheap, perhaps tempting prices. The cheap prices themselves epitomise the whaling industry in Norway, a reminder of the government's attempt to increase demand by way of subsidising – An effort to keep the 'tradition' alive. Norwegian whaling lobbyists often use the word tradition as a way of reaffirming their need to continue whaling, and will refer to the fact that the Vikings would have relied on whale products during the 8th and 9th centuries. However, with a lack of support and/or commercial benefit, they must be starting to question whether such a tradition should be maintained, solely for one's loyalty to tradition.

Contrary to belief, Norway hunts whales legally despite the International Whaling Commission (IWC) banning commercial



whaling in 1986, as they registered objections to the ban, along with Iceland, and as such are not bound to it. Japan, however, operates under a scientific research permit issued by the IWC. However, their most recent catch of 333 whales in 2016 (WDC, 2016) suggests their intentions are in-fact commercial, and this is internationally recognised as such.

Most anti-whaling activists are against the practice due to the notoriously cruel hunting techniques used. Whales are large, moving targets unable to be caught alive, without causing pain. Individuals are shot with an explosive harpoon from ships, often from great distances. Because of this, whales do not die instantly. Around 280 whales (Altherr et al. 2016) in the last two years alone are estimated to have met this fate, as a result of Norwegian hunting. Whales are instead slowly drowned, being unable to lift their heads above the water, and can suffer in pain for over 10 minutes.

The only species hunted by Norway; the North Atlantic minke whale, is, in the conversation sense, of least concern (IUCN, 2008), therefore, Norwegian commercial whaling is thought to be highly sustainable. It is for this reason

that Norway's "green groups" are seldom heard from regarding the issue, safe in the knowledge that there are an estimated 130,000 whales in the population, and with the belief that the industry will disappear within a generation due to decreasing demand and limited export opportunities. However, leaving the whaling industry to die off over the next generation means that many more whales will have to die to feed the trade. A sobering thought indeed.

So, in essence, the Norwegian government would have us believe that their whaling industry is booming. In truth, every man and his whale hopes that the sooner the government lets go of their blind belief in the industry, the better.

SOURCES CITED:

Altherr, S., O'Connell, K., Fisher, S., Lüber, S. 2016. *Frozen in Time. Report by Animal Welfare Institute, OceanCare and Pro Wildlife.* 23 pp. Available at: goo.gl/TCGm1C

IUCN, 2008. Available at: iucnredlist.org/details/2474/0

WDC, 2016. Available at: whales.org/wdc-in-action/stop-whaling

Be aware!

August, 31st: International Overdose Awareness Day

TEXT: Marina Borovaya
PHOTO: Wikimedia Commons

Jimmy Hendrix, Janis Joplin, Kurt Cobain, Billie Holiday, Amy Winehouse, Prince - does it feel too far away? How about that Norway “tops heroin overdose ranking” in comparison to other European countries, according to ‘The Local’.

67 in Norway died of overdoses for every million inhabitants, comparing to just 19 per million in Europe as a whole, indicates European Drug Report 2016. Most of us would be surprised how much closer to the problem of overdosing we currently are, even if we don't use illegal drugs. Government along with pharmaceutical companies supplies us with enough legal substances for it to become a problem. Thereby I mean people who easily empty six beers on a Saturday night, friends taking Paracet and other painkillers on every small occasion and this guy who has been prescribed Dexedrine to treat his ADHD and seems to become very hooked on it. Actually more people these days die due to the overdose of prescribed drugs and alcohol, rather than illegal substances. Whether the substance is legal or not it might be dangerous and addictive.

Stigma surrounding the word 'overdose' doesn't make it easier for people who happen to deal with it and their family members. Especially when it comes to illegal drugs, people often shake their heads in fear and disgust. Don't turn your back on people who need help, by putting them on the edge of the society.

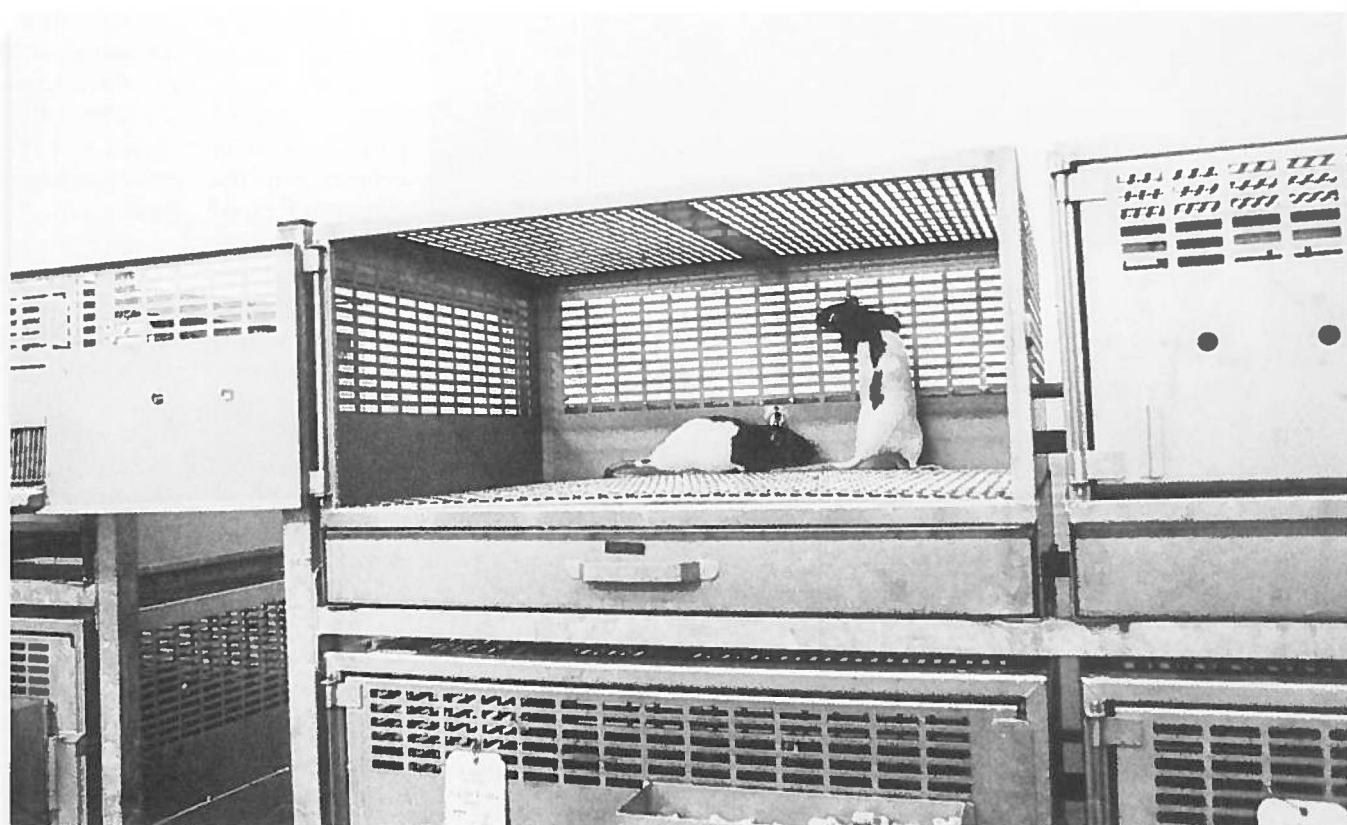
According to Johann Hari's book "Chasing the scream: The First and Last days of The War on Drugs" the truth about addiction is that it is caused by the lack of connection. Isn't it a drug that causes addiction? An experiment on rats conducted by Professor Bruce K. Alexander shows that the mechanism of

addiction is not that simple. Scientists put a rat in a cage, where it was offered two reservoirs with water. One of them contained heroin and the other one was just regular water. The rat was more and more often choosing the heroin containing water and died of an overdose shortly after. But the interesting result appeared in another setting. Many rats were put inside the same cage together. They were given enough food, both clean and drug containing water and were put in a playground, where they could socialize and have fun. A rat park, so to speak. The fascinating thing about it is that in this case, the rats almost never used the drugged water, none of them was abusing it and no one ever overdosed.

Another experiment in the Vietnam War illustrates exactly the same pattern. Over 20% of the American troops were using

heroin. News reports from this time reveal that people were really concerned about these soldiers coming home, being heroin addicts when the war was over. But that never happened. They didn't have to go to rehabilitation, 95% of the soldiers just stopped using heroin when they came back to their families and friends. According to professor Alexander, addiction is not about chemical hooks, it is about adaptation to environments.

Therefore it is pointless to talk about individual recovery, we need to start talking about society's recovery and reconsider the way we look at overdose and closely connected with it the problem of addiction. Only by becoming less judgmental and more open-minded we can fight problems facing our society. Love and take care of each other, because this is the only thing that really makes a difference in the world.



Northern Lights – ‘A kiss blown by the sun’

TEXT: Cora Dieterich
PHOTO: Wikimedia Commons

These days, northern lights start to appear in the sky above us, leaving us mesmerized by their beauty – and wondering how exactly this natural spectacle is formed.

Over thousands of years, as the days began to become shorter and the nights longer towards the winter season, people of various cultures were mesmerized by strange lights dancing across the dark sky. Many myths evolved concerning the impressive phenomenon, and it was even said that ‘God is angry when the aurora flames’. The Sámi here in northern Europe call the northern lights “guovssahas” or “the light you can hear”. Nowadays, the reason for the *Aurora borealis* is well understood, but nevertheless the northern lights still withhold their mysterious beauty.

The physics behind the northern lights is surely as exciting as the phenomenon itself, and will broaden your amazement of the *Aurora borealis*. Please don’t be scared by the term ‘physics’ – this will only be a basic explanation you can impress your family and friends with (or your crush on a romantic date) – so keep reading!

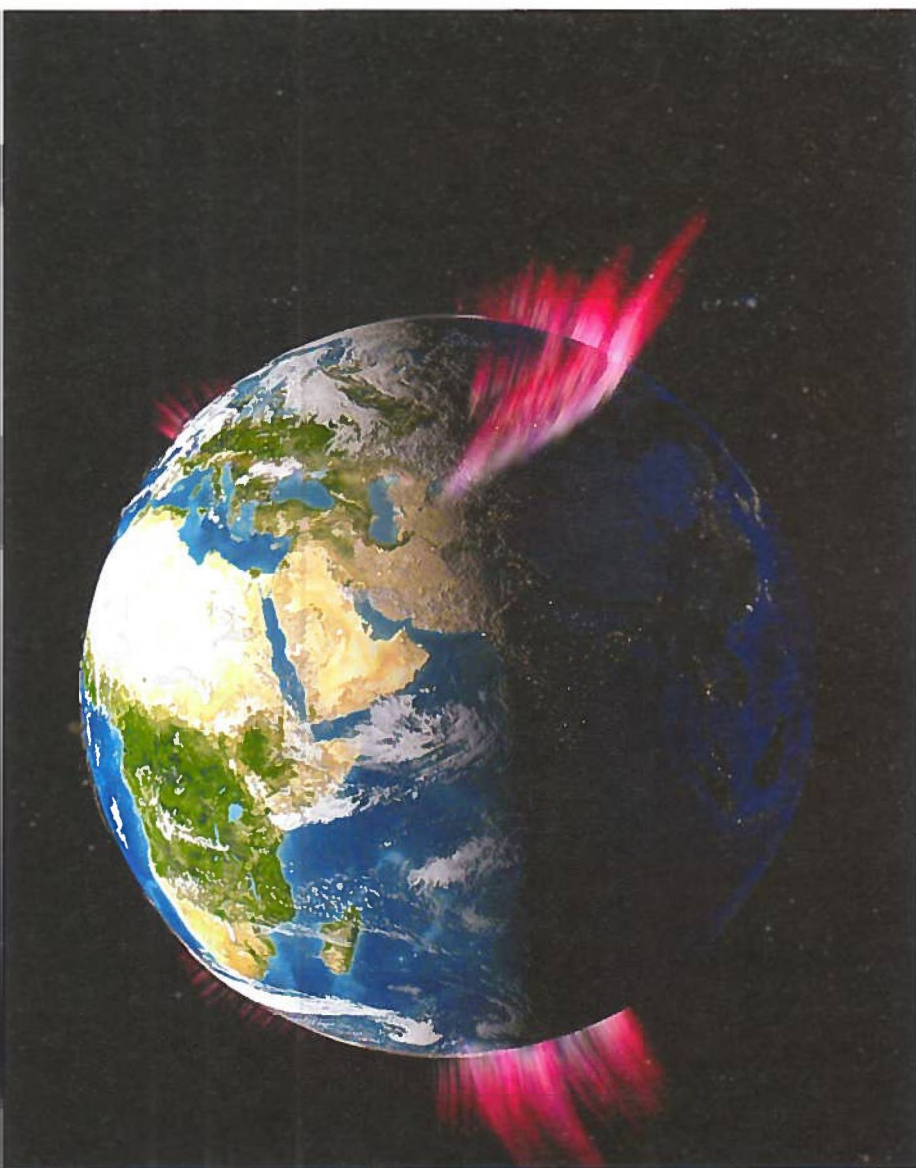
Although the northern lights are seen at times when the sun is absent in our sky, they are caused by ‘the star’ of our solar system. Activity in the sun can result in the emission of clouds of hot plasma gas, mostly consisting of charged particles – pretty cool, right? These ejections lead to the withdrawal of the plasma gas from the sun, which is blown into our solar system as solar wind. It takes the wind only a few days to travel past Mercury and Venus before it reaches Earth. Here the charged particles come in contact with the magnetic field of our planet. Since the particles are charged, they flow alongside the magnetic field to the magnetic poles. As they travel closer and closer to the poles, they eventually collide with particles in the atmosphere surrounding Earth. The charged particles transfer their energy to these atmospheric par-

ticles and lift them into what is called an ‘excited state’. This is comparable to you eating a lot of granola bars to gain enough energy to study or work out – exciting, isn’t it? However, in the same way that you lose your energy over time, the excited particles in our atmosphere also fall back to their normal state, the so called ‘ground state’. This is what happens when you see the northern lights! As atmospheric particles make the transition back to their ground state, they lose the energy they got from the charged particles in the solar wind, and this energy can be seen as light – the northern lights.

Moreover, beside the light itself, the varying colours of the *Aurora borealis* – from green to red to purple – surely add to the magic of this spectacle. Now as I said, the sun particles collide with particles from our atmosphere. Our atmosphere consists of air, or more precisely mostly of nitrogen and oxygen. If nitrogen is lifted into an excited state, it emits red light. If oxygen is lifted into an excited state, it can emit different colours depending on the height of the collision: red light above 300 km, or green light between 100 - 300 km. Blue and purple colouration is caused by hydrogen and helium respectively, but can only be seen faintly by the human eye.

The *Aurora borealis* only occurs up here in the north, but *Aurora australis* can be seen near the south pole. Astonishingly, there is even Aurora on Jupiter. Similar to the Aurora on earth, it is also caused by charged particles interacting with gases near the poles of this gas giant, but can only be seen in far-ultraviolet images of the planet.

Now you know the basic facts about the northern lights. Congratulations! Feeling like a scientist, right? So besides all this knowledge, where is the mystery? Well, one big question remains. Scientists are not able to explain the different shapes of the lights... maybe these shapes are caused by spirits – who knows!



The CRISPR/Cas-system

TEXT: Jahn Schmidt
PHOTO: Wikimedia Commons

Will a molecular tool change the fate of humanity?

CRISPR/Cas – it sounds somewhat crispy, makes one think of oily, fried things, but is nothing like it. In fact, it is a technique which experienced a real hype by the scientific community, since its development in 2012. People's eyes sparkle with enthusiasm – it will potentially cure AIDS, cancer and even prevent aging processes! What is it, though, how does it work and why do people think CRISPR/Cas-systems will change everything? And will it really change everything?

First of all, there is DNA. DNA is the information storage in every living cell which is responsible for every functional part in a cell, typically proteins. Imagine installing a shelf from Ikea. DNA tells you how to align the boards, the metaphorical amino acids; produce a functional protein. DNA is the information locked in a sequence of molecules, a code – and is used by everyone including viruses, bacteria, plants and humans.

Let's start with bacteria. Bacteria can get sick too! Just as us, humans, can be attacked by some viruses and get a flu, bacteria can be infected by viruses whose main task it is to infect bacteria. In order to do this, these viruses try to plant some nasty viral DNA into a bacterium. The bacterium is not happy about this. Try to picture yourself installing a shelf you bought from IKEA. Only, they deliberately gave you instructions for a whole new IKEA branch, instead of the shelf you wanted. Not only would you waste a lot of time, but also help the company trap other clueless customers in a vicious circle. IKEA would then spread and soon dominate the furniture market! However, most bacteria have an immune system. In their genome there's a kind of a "wanted list" of viral DNA. So, as soon as unwanted viral DNA enter the bacterium, the latter can catch it red-handed and simply tear it into little useless pieces. Game over, virus!

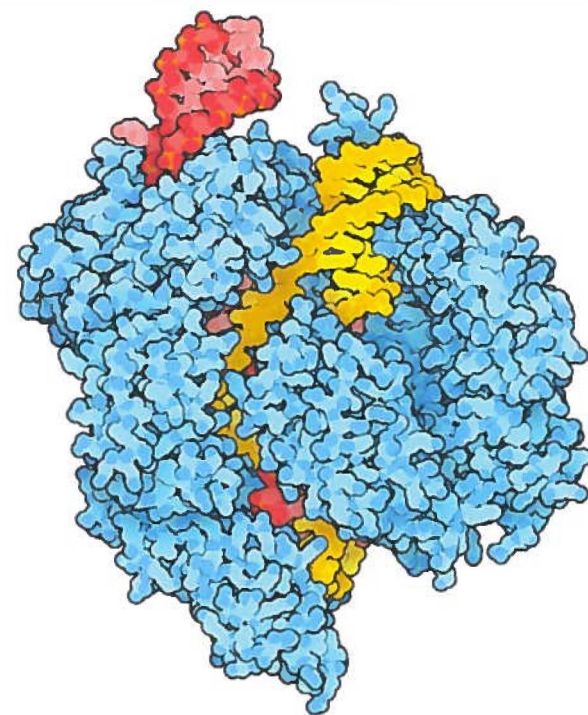
This handy "wanted list" was discovered by scientists already in the 1980s, when they observed a strange pattern in some bacterial genomes. One DNA sequence would be repeated over and over again, with unique sequences in between the repeats. These scientists apparently had a

fetish for acronyms which sound like tasty food and called this odd configuration "clustered regularly interspaced short palindromic repeats," or CRISPR. The proteins which use the sequence in the "wanted list" as a blueprint and are able to cut DNA matching their blueprint, were called "CRISPR associated nucleases". In short "Cas". An abbreviation within an abbreviation! Therefore, the CRISPR/Cas-system is actually a naturally-occurring, ancient defense mechanism found in a wide range of bacteria.

Wait, we can use these bacterial tools for our own purpose! If we could feed any blueprint we want to the Cas-protein, it'd be possible to cut any parts of DNA and even replace them by adding ones that are desirable. This is exactly what scientists did – they "tamed" the CRISPR/Cas-system and engineered it to find and cut exactly any DNA desired.

Changing genomes appears as nothing new: the first genetically modified mouse was created in the 1970s. Monsanto created plants with increased pest resistance by adding a gene for a toxin. Today genetically manipulated bacteria produce insulin for diabetic patients. The engineered CRISPR/Cas-system, however, works instantly in living cells and is very specific, which makes everything a lot easier, faster and cheaper. Although this article simplifies heavily and of course all these processes are much more complicated, the method itself is very easy to use. Probably anyone could use it within a week of hands-on practice.

So what are the prospects? Cutting HIV-genes out of immune cells of patients does not seem implausible, especially since this has already been accomplished in artificially HIV-infected mice and rats. Changing genes in a living patient is called a gene therapy, and, indeed, the engineered CRISPR/Cas-system is an elegant approach to the treatment of diseases caused by one single gene. Nevertheless, properties and processes such as intelligence, aging and cancer are controlled by many genes which intertwine in an incredibly complex network of feedback regulations. Adjusting only one screw may not help a



A space-fill drawing of a Cas protein from Streptococcus bacteria (blue) binding a blueprint sequence (orange) and a viral DNA (red).

lot, though since it's much easier to play around and tinker with screws now, it's probable that a much better understanding of such networks will arise. Engineered CRISPR/Cas-systems will accelerate researches in many fields – faster than laws and public ethical consensus may hold pace. In fact, the development of the engineered CRISPR/Cas-system exemplifies very well how progress in sciences can happen faster than people can agree on how to exactly deal with the results of such a progress. Of course, we want to heal a baby with a birth defect. But do we want to create humans with special engineered properties such as extra strength or improved vision, and so on? Do we want designer babies? Would only rich people benefit from such innovations? These could appear as simple yes/no questions, though, in effect, there will never be definite answers. Yet we can give a simple answer to the questions raised at the beginning of this article: the engineered CRISPR/Cas-system already has changed a lot and will definitely change more, but in order to reach for the stars, more than just a nice scalpel on the molecular level is necessary.

Hiking around Tromsø – Kjølén (790m)

TEXT and PHOTO: Christine Butz

Do you feel like you should do a hiking trip in the area to get a real glimpse of north-norwegian nature? That sounds like a good plan! What drags most people to this part of the world is definitely not the summer weather or the shopping possibilities, but very often the possibility to experience pristine nature - so get started. We want to suggest a trip close to Tromsø.

Our first suggestion is a mountain trip to the weather station on Kjølén (790m) on Kvaløya, which gives great view over Tromsøya and the north side of Kvaløya. It's easily accessible since you can start off from the first bus stop after the bridge, called Kvaløysletta terminal. The track starts on the right behind the school: First it is a road that turns into a gravel road after a gate and it eventually becomes a trail that winds to the top. One way is about 7

km and the inclination is quite steady the whole way, which makes it easy to walk for most people. We tried this trip with a cosy gang from Utopia and walked 3 hours up and 2 hours down, taking time to talk, to observe reindeer and hawks, pick berries and enjoy the constant changing views. So you can definitely make it the Norwegian way – faster: The DNT (The Norwegian Trekking Association) estimates 3,5 hours for an average male adult for this trip.

At the top there is a little, open cabin waiting next to the weather station to offer a nice place to have a sheltered lunch, where you can warm up when the wind is roaring outside. The path is quite trodden and marked up to the top, but there are different path options, e.g. past lake Amundvatnet or lake Mellomvatnet. It's always good to have a map and a compass, which gives you more security, when the weather

is changing fast or when you would like to go off track. There are plenty of streams providing drinking water on the way.

This trip is something for you, who don't have too much hiking experience and want to experience a top tour that is close to the city center with streams and lakes, rough mountain walls and a 360 degree view on top. If you are out to have a wilderness trip in solitude, you might get disappointed. There might be other people out to enjoy that route as well and you see clear signs of civilisation, like dams and transmission lines on the way.

It is worth checking out the homepage ut.no, where there is a description of the tour and maps available for this trip and for others all over the country. Remember to always pack warm and waterproof clothes. *God tur!*



Let the games begin!

TEXT: Stefan Kapetanović

PHOTO: Wikimedia Commons

Since 1936 and the Olympics in Berlin, basketball is one of the Olympic sports. At those first Olympics in Berlin, the USA won the first place, while Canada was second and Mexico ended up third. Since then many things have changed. Many country names changed, many gold medal winners changed, but the passion for this game remained the same. Still, every professional sportsman's wish is to win a gold medal at the Olympics. It is the icing on the cake of a sportsman's career. From 1936 until now the USA won the most Olympic medals in basketball: 14 gold, one silver and two bronze medals, followed by the Soviet Union, who won eight medals (one gold, four silver and three bronze) and third on that list is SFR Yugoslavia with four medals (one gold and three silver). As said earlier, countries' names changed, so there is no Soviet Union any more, and Russia as a part of that ex country won 1 more bronze medal, and also there is no more SFR Yugoslavia as well but now we have Croatia which won 1 silver medal and then Yugoslavia 1 more silver medal.

These Olympics in basketball in Rio were the first ones for Serbia since it became an independent country back in 2006.

Earning a place at the Olympics is not easy, as the criteria for being amongst the 12 teams from the whole world in Rio are really hard to achieve. By being the World Champion in 2014 in Spain, the USA directly qualified to the Olympics. Nigeria won the AfroCup, China as a winner of Asia Championship, Australia is the Champion of Oceania, Venezuela won the Americas Championship while Argentina was the other finalist and Spain won from Lithuania at the EuroBasket. Serbia, Croatia and France won the Olympic Qualifying Tournaments and Brazil is the host of the tournament.

The start of the Olympics was a bit unstable for many teams apart from the USA, which was the only team that won every game in the group phase. A pleasant surprise in the group phase was Australia, who played some amazing basketball and who ended up 2nd in group A with a score



of four wins and only one lost game. Group A was made up of the USA, Australia, France, Serbia, Venezuela and China, while in group B Croatia, Spain, Lithuania, Argentina, Brazil and Nigeria competed. Another nice surprise was that Croatia became first in group B with a score of three wins and two losses, and thereby were ahead of the European Champion, Spain, and the European finalist, Lithuania. Since the first four teams of each group make it to the quarter finals, the competition ended with the group phase for two teams of each group. As more or less expected, those four teams were Venezuela and China from group A and Brazil and Nigeria from group B.

The quarter final matches were set and Australia played and won pretty easily against Lithuania with a score of 90:64. Serbia won against Croatia in a really tough game by three points margin. The score was 86:83, where the Serbian team won the third quarter 34:14, which was one of the key points of the match. Also, Spain surprisingly won against France with a score of 92:67. That game was also the last game for French basketball legend Tony Parker. In the last, but not least, quarter final match the USA won against Argentina by 27 points margin: 105:78.

So in the semifinals Australia and Serbia met once again and Spain played against the USA. In the first semifinal match the

USA kept the lead throughout the whole match and won with a score of 82:76 with which they ensured one more Olympic basketball medal. In the other semifinal match Serbia showed an outstanding defense allowing Australia to score only 14 points in the first half, leading with 21 points at halftime. By playing consistently in the second half, Serbia made it to the finals with a score of 87:61. This was Serbia's first medal as an independent country.

The match for third place was really tough, but it seemed that the experience of the Spanish players brought them the one point that was needed for victory and put them on the podium once again. Unfortunately for Australia, they did not make it to their first medal in basketball at the Olympics even though they were so close.

Before the finals, it seemed that Serbia could play equal with the USA, mostly because they lost only by three points in the group phase, where Bogdanovic even had a chance to take Serbia to overtime, but did not score. When the finals started, Serbia kept the pace and the first quarter was tight, the score being 19:15 for the USA. But all other quarters showed that the USA are still a much better team at the moment, which lead them to a 96:66 victory, ensuring them the 15th gold medal at the Olympics.

Sjakk-OL i Baku

TEKST: Simon Steinnes

To år etter at Tromsø arrangerte sjakk-OL, har turen kommet til Baku i Aserbajdsjan. Byen ved det Kaspiske Hav har gitt sjakken flere storheter, som Teimour Radjabov og Garri Kasparov. Førstnevnte spiller på førstelaget til Aserbajdsjan, som nok aldri har hatt bedre sjanser til å ta sin første medalje i et sjakk-OL. Sammen med Shakhriyar Mamedyarov leder han hjemmelaget, som siden forrige OL har hentet inn en forsterkning i form av Arkadij Naiditsch fra Tyskland. Naiditsch huskes nok best for partiet mot Carlsen under OL i Tromsø, da Norges førstebordsspiller gikk på et overraskende tap.

Magnus Carlsen er også med i år, og leder det som kanskje er Norges yngste OL-lag gjennom tidene. Jon Ludvig Hammer på andrebord er med sine 26 år lagets eldste spiller, mens Aryan Tari på tredjebord er yngst med sine 17. Fjerdebord og reserve fylles av Frode Urkedal og Nicolai Getz, som begge deltok i Landsturneringen i Tromsø i sommer, der begge endte på noe skuffende 50%. Vinneren av Landsturneringen, Johan

Salomon, mistet reserveplassen fra EM til nettopp Nicolai Getz, og Torbjørn Ringdal Hansen var også et hett navn i diskusjonen om reserveplassen. Det er i alle fall opp til Getz selv å bevise at han fortjener plassen på laget.

Torbjørn Ringdal Hansen endte likevel med å dra til Baku. Stormesteren er trener for damelaget, som er en god blanding av erfarne veteraner og sterke ungdommer. Sheila Barth Sahl, Olga Dolzhikova og Ellen Hagesæther er alle født på syttitallet, mens Tromsø-tvillingene Edit og Monika Machlik er født i 1997. De to yngste spillerne er fjerdebord og reserve, men har så langt vist seg å være utmerkede poengplukkere for Norge. I skrivende stund er tre av elleve runder spilt, og damelaget står med klare seire mot Barbados og Skottland, og et knepent tap mot knallsterke USA. Edit har spilt alle tre rundene, og står med to seire og en remis, mens Monika, som sto over mot USA, har vunnet begge sine partier. I tredje runde slo Edit grundig knockout på motspilleren fra Skottland:

Edit Machlik - Joy Durno

1. d4 Sf6 2. c4 c5 3. d5 e6



Dette er moderne Benoni, et skarpt og tveegget forsvar mot 1. d4. Sort får ofte spill på dronningfløyen, men kan fort bli overkjørt i sentrum.

4. Sc3 exd5 5. cxd5 d6 6. e4 g6 7. f4 Lg7 8. e5 dxe5 9. fxe5 Sfd7



Hvit søker å oppnå noe konstruktivt med bøndene på d5 og e5, mens sort gjerne vil underminere hvits sentrum. I denne typen stillinger avhenger mye av om disse bøndene er sterke angripere eller sårbare angrepsmål.

10. e6 fxe6 11. dxe6 De7 12. Sd5 Dxe6+ 13. De2 Dxe2+ 14. Lxe2 Le5?

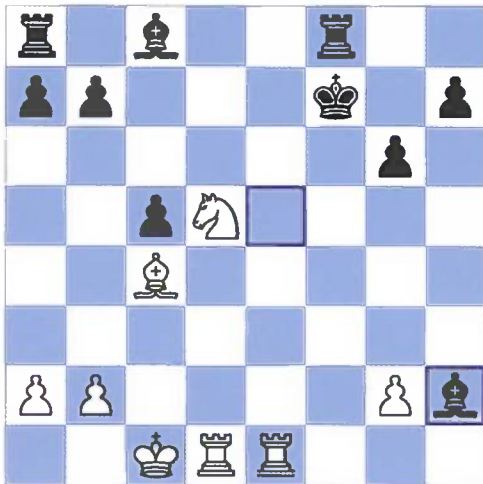


Her kan det ha vært nødvendig å ofre materiell for aktivitet. Teksttrekket stopper trusselen Sc7+, men hvit får en stor fordel i form av mer aktive brikker og konkrete trusler. Datamaskinen angir 14... Sa6 som bedre, men overraskende nok er 14... O-O førstevalget. Etter 15. Sc7 Sb6 16. Sxa8 Sxa8 har sort en bonde for kvaliteten, og hvit har ikke lenger de samme truslene som før.

15. Sf3 Ld6 16. Lh6!

Utvikler den siste lette offiseren og dekker viktige felt på den sorte kongefløyen.

16...Sc6 17. O-O-O Sde5 18. Lg7 Tf8
19. The1 Kf7 20. Lxe5 Sxe5 21. Sxe5+



Lxe5 22. Lc4 Lxh2??

Plukker en bonde, men tillater hvit å tvinge matt. Stillingen var nok uansett ikke til å redde.

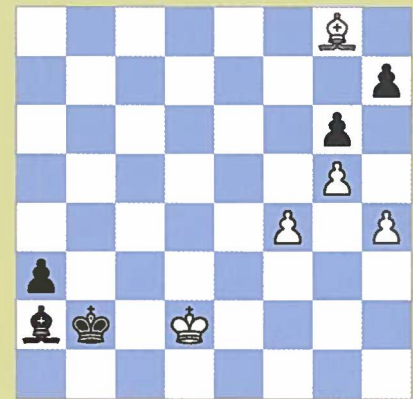
23. Te7+

Sort ga opp på grunn av 23... Kg8 24. Sf6+ Kh8 25. Txb7#.

Når du leser dette er sjakk-OL i Baku sannsynligvis over for lenge siden, og kanskje har en eller flere av de norske spillerne levert overraskende og imponerende prestasjoner. I neste spalte vil vi oppsummere turneringen og se litt nærmere på hva som skjedde, dersom det ikke skjer noe mer spennende på hjemmefronten før den tid. Det ryktes nemlig at Tromsøsjakken skal spilles siste helg i september.

Månedens nøtt

Hvit trekker og vinner.



Send trekkforslag med begrunnelse til sst067@post.uit.no innen 1. oktober 2016, og vær med i trekningen av fine premier.



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Tannlege Jan Erik Kjærstad
Tannpleiere Anita Wiik,
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ARTIST: The Veils
ALBUM: Total Depravity
RECORD LABEL: Nettwerk Records
RATING: 6/6

How to become addicted without adverse health effects

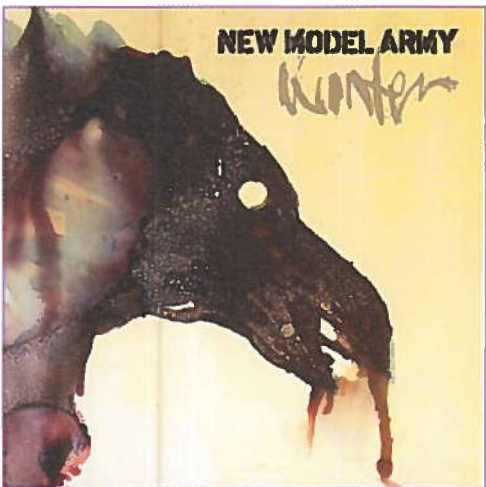
TEXT: Stefanie Singh

"A young but maturing real artist in the vein of Nick Cave and David Bowie": That's how Finn Andrews, frontman of the London-based band The Veils, was once described. A description that is pretty accurate and anything but far-fetched. To describe the musical style of The Veils is a bit more difficult, though. "Indie Rock" or "Alternative Rock" is too simple, at least when referring to their brand new opus "Total Depravity".

"Total Depravity" is not a typical indie or alternative album where one song is followed by another; it's more like a trip. Imagine it's the weekend and you're sitting in a dimly lit bar, asking yourself what you're actually doing here. It's boring. And then, all of a sudden, the bartender puts on the fifth studio album by The Veils. Maybe you know neither the album nor the band, and before you can ask for those details, you start to

lose yourself in the songs. "Oh my soul, losing control", as Finn Andrews is singing in "Axolotl", the opener and first single on the album.

"A Bit On The Side": Is it just me or would that track also work perfectly as a duet with MØ? While listening to "Low Lays The Devil", one can totally imagine how Josh Homme and his Queens Of The Stone Age would interpret this composition. The same applies to "Here Come The Dead", except that the interpreter here would be The Doors' Jim Morrison. Overall, here and there, "Total Depravity" is reminiscent of the sound of The Doors: sometimes psychedelic, sometimes melancholic ... And then, suddenly, the album ends with the title track. The trip is over, and the only thing you might wish for is the bartender pushes the "repeat" button, as you just became hopelessly addicted.



ARTIST: New Model Army
ALBUM: Winter
RECORD LABEL: earMUSIC
RATING: 6/6

He who laughs last...

TEXT: Stefanie Singh

Winter is coming: In "Game Of Thrones", to Northern Norway and also into the shelves of your local record store as New Model Army have just released their 14th studio opus entitled "Winter". Founded in 1980 in Bradford, England, the quintet around frontman Justin Sullivan can look back on a 35 year band history in which their musical style has been labelled, amongst others, as punk rock, gothic, metal and folk, often accompanied by lyrics of political nature. And as for "Winter", all those labels are applicable.

"Winter" is a dark, melancholic and yet very powerful rock album whose lyrics couldn't be more up-to-date: War ("Winter"), the European refugee crisis ("Die Trying"), criticism of the political system ("Burn The Castle")... "Winter" demonstrates in a wonderful way that inconvenient issues can be broached in euphonious compositions.

Not without good reason, the band refers to its brand new output as "a powerful and emotionally intense body of work". Justin Sullivan: "[...] I think 'Winter' has a really strong identity. It is very much the sound of people in difficult places - something that so many of us can relate to at the moment, on a lot of different levels."

One of the strongest tracks on "Winter" is the current second single "Devil", whose music video consists of scenes from the 1926 silent film "Faust" with Gösta Ekman, Sr. as Faust and Emil Jannings as Mephisto only. And while we are on the topic of music videos: during a TV appearance in the 1980s, New Model Army were announced as "the ugliest band in Rock'n'Roll". It's comforting to know that not everything is bad these days. The superficial music television is dead... while New Model Army are still alive and kicking.



ARTIST: Kaleo
ALBUM: A/B (2016)
RECORD LABEL: Elektra/Atlantic records
RATING: 5/6

A fascinating, extraordinary, super melodic creation of the Icelandic indie-pop rock band

TEXT: Alena Antipina

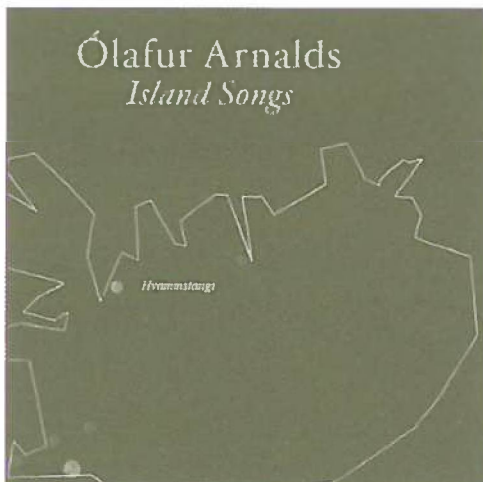
The Icelandic music band, which started their music production in 2012, is now gathering more and more listeners around the world. The 'why so?' question does not appear at all when turning on their latest album *A/B*. The album indeed seems like all the most popular genres glued together in one piece of musical art.

The mixture of the vocalist *Jökull Júlíusson's* extremely enchanting voice, atmospheric guitar and violin fusion makes you dive into some deep emotional level within yourself. Indeed! Just switch on one of the most impressive songs in the album – *Vor í Vaglaskógi* – and try not to fall in love with these tones of music immediately... Despite slow and smooth melodies, Kaleo's latest album

also has songs of quality blues and rock, such as *No Good, Hot Blood*. Even some country style can be found – like in *Automobile*. Kaleo surely gathered all the styles in only one album – outstanding!

Kaleo has already gained popularity throughout the US and Canada. The magazine *Rolling Stone* has included them into the 'Top 10 New Artists You Need to Know' rating. So let's raise the popularity of this good music throughout UiT then!

Speaking of the atmosphere of the album, which arises whilst listening to the songs from *A/B*: there is the actual feeling that the whole album is about one personality, but with different moods, thoughts and even appearances.



ARTIST: Ólafur Arnalds
ALBUM: Island songs
RECORD LABEL: Mercury classics
RATING: 6/6

Island songs

TEXT: Anezka Prosecka

Being home and not knowing about all this beauty, which is waiting around the world, sneaking around our homes or even not recognised in our homes. That is the way describe the feeling from the project "Island songs", possibly. A multi-instrumentalist took 7 weeks, 7 different places of Iceland, the country of his origin, 7 documentations of inspiration and compiled them into an etheric album. He finished his journey with recording his last song on 31st July 2016.

Of course, this „smell of home“ is modified with the typical northern nostalgia and melancholy imprinted into the background of the whole project, which goes along with photography and videos on its own website.

Ólafur Arnalds managed to capture the atmosphere of an old family house, big classicist auditorium, modern glass hall, harbour covered by fishing solitude, modern church in a stoned valley, old church on the lonely beach and two lighthouses.

In the album it seems that these archetypal places sound like they await their turn to play their tones. Matching with various instruments, not tiringly repeated, this short album flows in time and ends at the moment when a listener begins to seriously consider visiting Iceland.

Apart from expected electronical parts and leading piano, one can enjoy violins and different brass instruments, especially clarinets and organ. Moreover, Ólafur collaborated with Nanna Bryndís Hilmarsdóttir (a vocalist of *Of Monsters and Men*), Atli Örvarsson (famous conductor) Einar Georg Einarsson (the poet or the South Iceland Chamber Choir) during this journey and in particular songs.

The general feeling after listening the album does not leave me the choice but to give it rating of 6/6. That includes the scale of the project, the time of finishing it and its quality. More than that, if one compares his previous works to this album, once can notice that Ólafur Arnalds is still able to show his originality.

DIRECTOR: Henrik Martin Dahlsbakken **RELEASE:** September 2nd, 2016

RATING: 3/10

TEXT: Jennifer Britt Lundberg Hansen

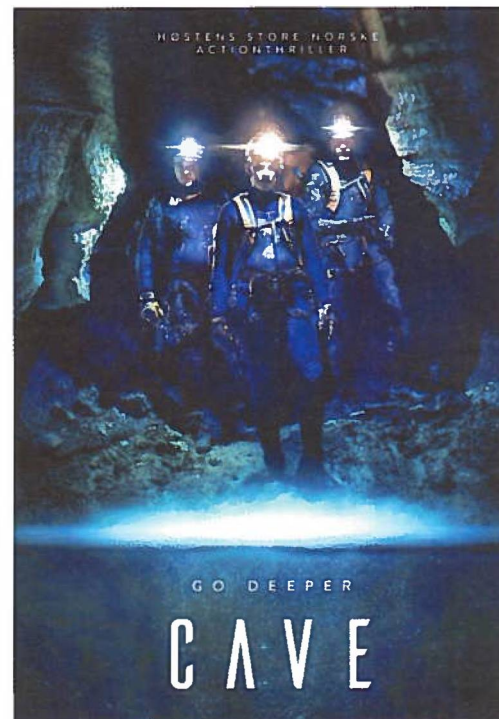
Relying heavily on dramatic music to tell a thriller tale, *Cave* (2016) is another Norwegian disappointment.

This is an adventure thriller film about three friends who plan to go through a cave and come out alive. Charlotte (Heidi Toini), Adrian (Mads Sjøgård Pettersen) and Viktor (Benjamin Helstad) are former soldiers who seem to be thrill-seekers. From the beginning we see them racing up a long and windy road up a mountain. Yes, this might have helped to build portraits of these characters, but the whole thing seemed like a very long car commercial. With the cheesy line deliveries and typical Norwegian theatrical acting, this so-called commercial lasted way too long. However, it did get better once they entered the cave.

Throughout the movie eerie things happen, and we are left to wonder what is going on.

Piece by piece, we understand what really is happening. Later, the clues will make you realize why some events were the way they were. In the end, we are left with confusion and presented with a sequel that comes out next year.

Filled with dramatic, exciting music by composer Johannes Ringen, this film will make you feel like you have been on a bumpy, yet short ride. It relies too heavily on this generic but good music, since the actors' dialogues are weak and the plot is poorly made. However, there are beautiful views of mountains coupled with a decent film editing. Also, interesting camera techniques are used. The pros of this film are some scenes down in the cave. Here is where Henrik Martin Dahlsbakken's directing skills are at their best, revealing his creative potential.



DIRECTORS: Andrew Stanton, Angus MacLane

RELEASE: August 26th, 2016

RATING: 9/10

TEXT: Jennifer Britt Lundberg Hansen

Thirteen years in the making, *Finding Dory* (2016) is the long awaited sequel to *Finding Nemo* (2003) that delivers with both heart and humor.



Dory (Ellen Degeneres) is a little forgetful. From early on and into adult life, she experiences short term memory loss. She has to constantly remind herself what she is doing and is about to do, or she will forget. This idea leads the narrative of this fish tale. What I like about this film is that it doesn't explain what is "wrong" with Dory. Rather, the focus is on what is RIGHT about Dory. The characteristics that define who she is, highlighting her abilities and not her disabilities.

Continuing one year after the events of *Finding Nemo*, Dory is off to find her parents after remembering something on a class trip with Nemo. On her way to find her long lost parents, Dory meets some new and old friends. We learn that Dory really DOES speak whale and we find out where the famous phrase "just keep swimming" comes from. On her search adventure, Nemo (Hayden Rolence) and his father Marlin (Albert Brooks) come along. The two clownfishes realize later

on, that when stuck in a challenging situation, the best thing to do is to think like Dory.

This sweet and hilarious film captivates with a clever storyline and relatable characters. Presented with flashbacks throughout, Andrew Stanton makes a complicated tale easy to follow for both kids and adults. At times you may want to bring out a tissue box as Dory's story is a little heartbreaking. The only drawback is that you really need to see *Nemo* in order to fully understand *Dory*.

Filled with copious amounts of humor and a stunning soundtrack, *Finding Dory* does not disappoint. With Ed O'Neill as Hank the octopus, Diane Keaton and Eugene Levy as Dory's parents, and Kaitlin Olson as Dory's whale friend. I recommend staying for Sia's rendition of "Unforgettable" during the end credits. Also, for another great Pixar movie about memory, watch *Inside Out* (2015).

DIRECTOR: Lars Kraume

RELEASE: September 2nd, 2016

RATING: 7/10

TEXT: Konstancja Suchanek

Adolf Eichmann var én av krigsforbryterne som den tyske riksadvokaten Fritz Bauer ønsket å arrestere og stille for retten i Tyskland. Under andre verdenskrig organiserte Eichmann identifisering og transporten av jøder til konsentrasjonsleirene. Etter krigen rømte han til Argenti-

na. Bauer prøvde å kjempe for rettferdigheten i sitt land og brant for å åpne det tyske folks øyner for forbrytelser nazister begikk under krigen. Riksadvokaten hadde flere fiender som sto i hans vei, men det var likevel hans venn og medarbeider, statsadvokaten Karl Angermann, som vekket den største oppmerksomheten. Han ble satt på en stor prøve og måtte velge mellom lojaliteten og sin egeninteresse.

Den tyske filmen «Jakten på Adolf Eichmann» (den opprinnelige

tittelen av filmen er «Der Staat Gegen Fritz Bauer», nemlig «Staten mot Fritz Bauer») inneholder ikke mye action og er stort sett basert på dialoger, men er spennende nok uansett. Spenningen bygges opp når Bauer nærmer seg pågripelsen av Eichmann. Det som gjør filmen enda mer oppsiktsvekkende er det at den handler om hendelser som faktisk fant sted i 50. årene. Skuespillerne (spesielt Burghart Klaußner som Fritz Bauer og Ronald Zehrfeld som Karl Angermann) gjør en makeløs innsats, og handlingen blir derfor skikkelig realistisk og troverdig.

«Jakten på Adolf Eichmann» anbefales først og fremst til alle som er glad i tankevekkende filmer eller interesserer seg for historie. Filmen kan ikke kalles for universal, men de som finner behag i fortid og krigsrelaterte tråder kommer til å verdsette den høyt!



DIRECTORS: Henry Joost, Ariel Schulman

RELEASE: September 2nd, 2016

RATING: 7/10

TEXT: Marie Søndergaard

Vee (Emma Roberts), another ordinary high school senior in Staten Island, is sucked into a competition that emerges out of the deep, dark web. The game is called Nerve and operates through a smartphone app. This underground game has two modes: player and watcher. The teenage universe Vee then navigates is a maelstrom of feelings tainted by insecurity together with the intense desire to be noticed. These feelings become clearer as Vee goes further into the game.

The first dare Vee has is to kiss a stranger at a diner. Once she arrives, she sets her sights on Ian (Dave Franco), who is reading "To the Lighthouse." However, this turns out to be no coincidence since Sidney [who is Sidney?] has listed Virginia Woolf's novel as her all-time favorite on her Facebook-profile. The anonymous watchers controlling the game think Ian and Vee make a nice couple, so they've been sent on dares together. This theme evolves through the movie.

The movie manages to make the viewer reflect upon how we personally use the Internet, especially Facebook, Snapchat, Instagram and other similar social media. Vee picked Ian for her dare because he sat with her favorite book; a book that she had listed on her Facebook-profile. This movie manages to show the consequences of what can happen and how easy it is to access personal information when people put their entire lives on display.

This movie also manages to capture how we all are living in an "always-online-time" era and illustrates how people can lose track of reality as soon as the game is a part of the reality.

Furthermore, I think, the movie reveals an excellent point at its conclusion – even though people (watchers) are hiding behind the anonymous Internet, they are still a part of it. At the end when

confronted with the consequences of their act, people sign out.

Nerve illustrates in a comic way how the Internet has become a gladiatorial arena of fame and followers to feel accepted. The movie is like the game itself – it is hard to stop watching – even when you know it's playing you.

I rate it 7 stars out of 10 stars since I believe it points to some important issues we are facing in our society today.



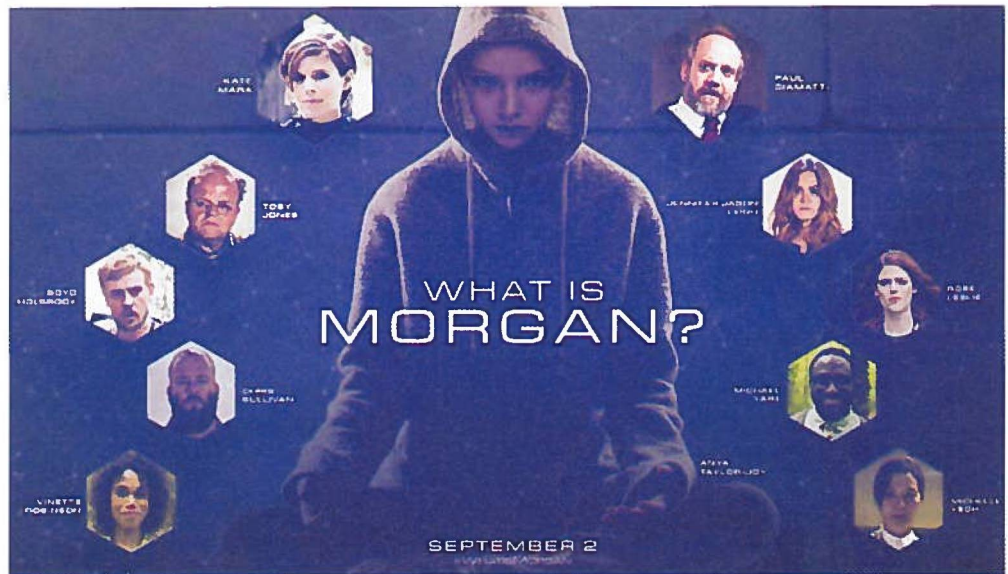
DIRECTOR: Luke Scott

RELEASE: September 9th, 2016

RATING: 4/10

TEXT: Marie Søndergaard

The age-old debate of nature-versus-nurture gets put through the sci-fi lens in the new movie "Morgan". It is a movie in a fierce pace from the beginning and all the way to the end. The opening scene is seen through a surveillance camera that shows Dr. Kathy (Jennifer Jason Leigh) entering a secured room. She is going to eat lunch with Morgan (Anya Taylor-Joy). They are sitting at the table chatting and all of the sudden Morgan pushes everything away from the table, jumps over it and stabs Kathy in the eye. You are thrown directly in to the movie, not really know what has happened before this incident. The viewers are left a bit confused and to do a lot of guessing.



Lee Weathers (Kate Mara), a risk management consultant is sent in to investigate the incident. Lee Weathers is a mysterious character adding an extra dimension to the movie with her tension and presence at the facility. She is tasked to determine whether Morgan should be terminated or allowed to live before it causes more chaos. However, the scientists who created Morgan are very clo-

sely link to her and as one of them describes, "they are like family". That is why they brush her violent outbreak aside. Their blinded love for Morgan is frustrating and the storytelling lacks subtlety in contrasting how they view the artificially created being as a human and how Lee and even the company's view it on this creation. The biggest issue is the moral question of the story. Morgan hinges on

the debate of nature vs. nurture but it never comes to any satisfying conclusions. It's easy to assume that the point of the film is showing, once again, that artificial intelligence is a bad idea, however this conclusion is not clear in the movie. It has a couple of nice, unexpected twists and is not as predictable as you might think, but the movie never really finds its focus at this rapid speed.

DIRECTOR: Clint Eastwood

RELEASE: September 9th, 2016

RATING: 7/10

TEXT: Jennifer Britt Lundberg Hansen

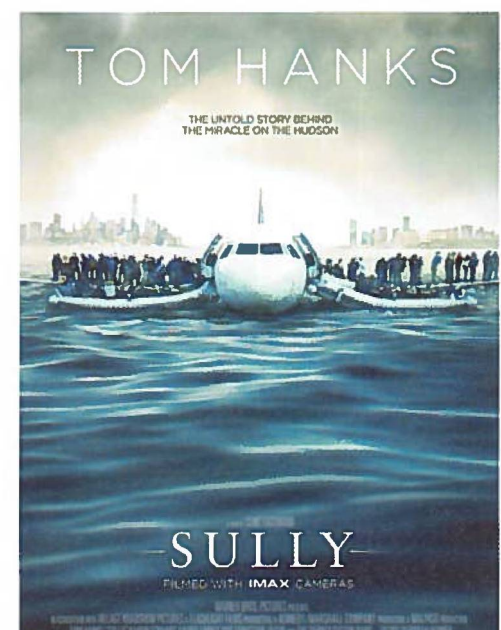
On January 15th, 2009, Chelsey "Sully" Sullenberg (Tom Hanks) decided that the best way to land a plane without working engines, was on the Hudson River. Sully (2016) focuses mainly on the consequences of that decision.

Upon leaving New York, US Airways flight 1549 had 155 passengers - all of which survived. After a flock of geese crippled both engines, Sully and his co-pilot Jeff Skiles (Aaron Eckhart) had to act instinctively in order to land the plane safely. With the nearest airport too far away, Sully ultimately makes the decision to land on the Hudson River.

Chelsey "Sully" Sullenberg (Tom Hanks) is seen as a hero by most people, yet to

others he is a bad decision-maker. In this film, we see what went on behind the scenes with the media and other lesser known investigations, showing us what happened to both Sully and Jeff in the aftermath. There is also great detail of the actual event which, shot from different points of view, creates for a very suspenseful film.

Clint Eastwood handles this biographical drama very well. Surprisingly, the back-and-forth style he chose to use, worked. Accompanied by great performances, audio and visual effects, and a near screenplay, this film is worth a watch. From beginning to end, it is filled with much excitement.





Mexican Pizza Burger

Cheap, simple and surprisingly good!

FOOD COLUMN

TEXT and PHOTO: Marie Søndergaard

Every student loves pizza and meat – so why not combine it? In this recipe there are two suggestions of how to mix the two things that students love the most – Meat and pizza. Release your imagination and try to come up with your own combinations. There are no limitations or right or wrong.

Recipe

- 1 Form the grounded meat into 4 burgers.
- 2 Fry them a few minutes on each side in the pan.
- 3 Just before they are done, add the salsa or red pesto and cheese (as much as you desire) on top of them. They are done, when the cheese is melted.

Ingredients:

- 500 g grounded beef
- Red Pesto
- Cheese
- Bacon



Tracing the Sidewalk

TEXT: Sophie Scotter

ILLUSTRATION: Tatiana Lyapochkina

*How would the city look,
With a myriad of footprints in our wake?
An illustration of every moment
The greetings, pauses, meetings, causes
Of our going to and fro

Some are trodden side by side
Heart to heart, synchronised.
Lonely steps head purposefully to lonely places
Whilst a muddled track, confused, turns back.
The rhythm of life

Parting ways, disturbed abandoned.
A painted side-walk of wandering minds
And Winding paths
Oh what a picture I might see,
If the city illustrated me.*



Utroscope



Aries: This month, you'll be waking up in mountains made of books. Your semester was supposed to start nice and smoothly, but everything transformed into a big mess: your days are a mess, your books are a mess and your head is an even bigger mess.



Taurus: Sometimes you approach people a little too suddenly. Beware, Taurus, time flies and Christmas will befall suddenly on your nose. Your friends will make sure to buy you a huge bell to know exactly when and where you are coming from.



Gemini: Meteorologists foresee a big storm coming – in your head. Storms can be dangerous, but you shall not fear! There is nothing for a storm to destroy on a plain field.



Cancer: This month you better stay away from every seafood restaurant in town. Not only will it give you bad stomach; it will also bring you a bad fortune. You see where we're heading at, don't you?




Leo: The Mirror Society wants to inform you that you will be invited to the court for hearing because of unstoppable complains about mental mirror harassment with your Big Ego. We'll make sure to deprive you of rights to have any more mirrors in your house.



Virgo: This month will bring you many new friends and plenty of unforgettable memories! However, at the end of the month you will discover that your friends were all imaginary, and you should consider consultation at Åsgård psychiatric hospital.

Missed Connections



Illustrasjon: Boyka Todorova, Text: Ursula McArthur

To the cute guy in my lecture last week:

Everything was going so great and then you just stopped talking to me. I can only presume this is because you saw me dribble accidentally. I want to tell you that I don't always do this. Maybe if I'm asleep, but not usually in social situations. Please give me other chance?

To my WiFi:

After an unsuccessful day trying to flirt in the library, it's always a relief to know you're still available to me.

Eye contact girl:

Sorry for staring. I wasn't really staring at you. It sounds weird but my eyes were actually just comfortable in that position. I'm sure you can understand this feeling.

Mum:

Stop asking me if I've made friends, I have some.

To the person who sat with me on the bus last night:

After years of travelling on buses like tinned fish on wheels, I'm so happy to be in a place where it's socially acceptable to sit on my own. If there's somewhere you can sit that's not next to me, then please do that. It doesn't mean I'm a bad person- I have some friends, I also do knitting and stuff. Anyway, it was about 21:42pm when an over-friendly stranger chose the seat next to me on an almost empty bus. And so they experienced something known as the 'double itch'. This is not a personal thing... I did not intend to repeatedly stroke your leg. I merely had a bite on mine I needed to scratch (I think I have bed bugs if I'm honest). As you squashed me against the window it was impossible for me not to weirdly rub your leg as I scratched mine. I hope we never meet again.

Text: Wilhelm Vold, Illustrasjon: Boyka Todorova, Kolorist: Kisarael Elementum



Libra: This month you'll meet a black-haired, green-eyed woman in a cloak standing outside your house at full moon. Let her in; she will foresee this month for you – instead of me, I'm not getting paid for it anyways.



Scorpio: Be careful, scorpio – bad karma is following you this month. It will start simple and unnoticeable, but might end up being a nightmare! Get yourself a roll of toilet paper, otherwise you will risk not finding one when you need it the most.



Sagittarius: Even stones will move out of your way this month. You know why? Because you're a true living disaster! Everywhere you go, things start to get really bad. So, please, don't leave your house for at least... [calculating number of years] ...like, ever.



Capricorn: Take your love-pants on, something interesting is coming your way this month. Your head will spin; butterflies will dance in your stomach... No, wait a second. It might just be a bad hangover.



Aquarius: Did you forget your deadline? Were you fired from work? Is life sh*t at the moment? Don't be sad and look out of the window! Do you see a homeless person under the rain? That's your perfect future! Life is going to be great!



Pisces: The academic year just started, but people are already tired of your never ending drama. Sign up to theatre and play some Romeo and Juliet. They both die in the end, by the way.



Foto: Sophia Hermann



Foto: Christine Butz



Foto: Christine Butz



Foto: Larissa Krölls

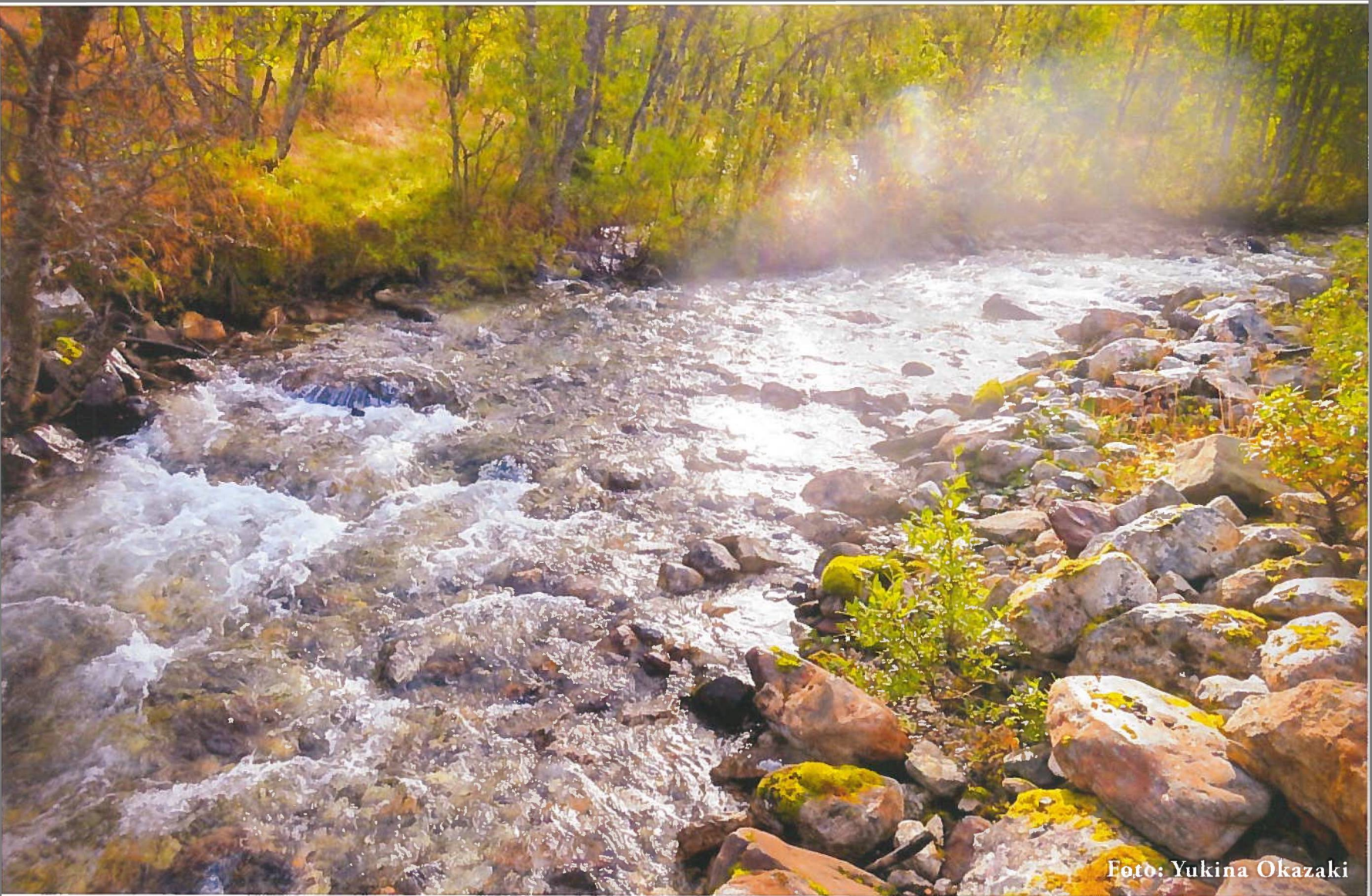


Foto: Yukina Okazaki

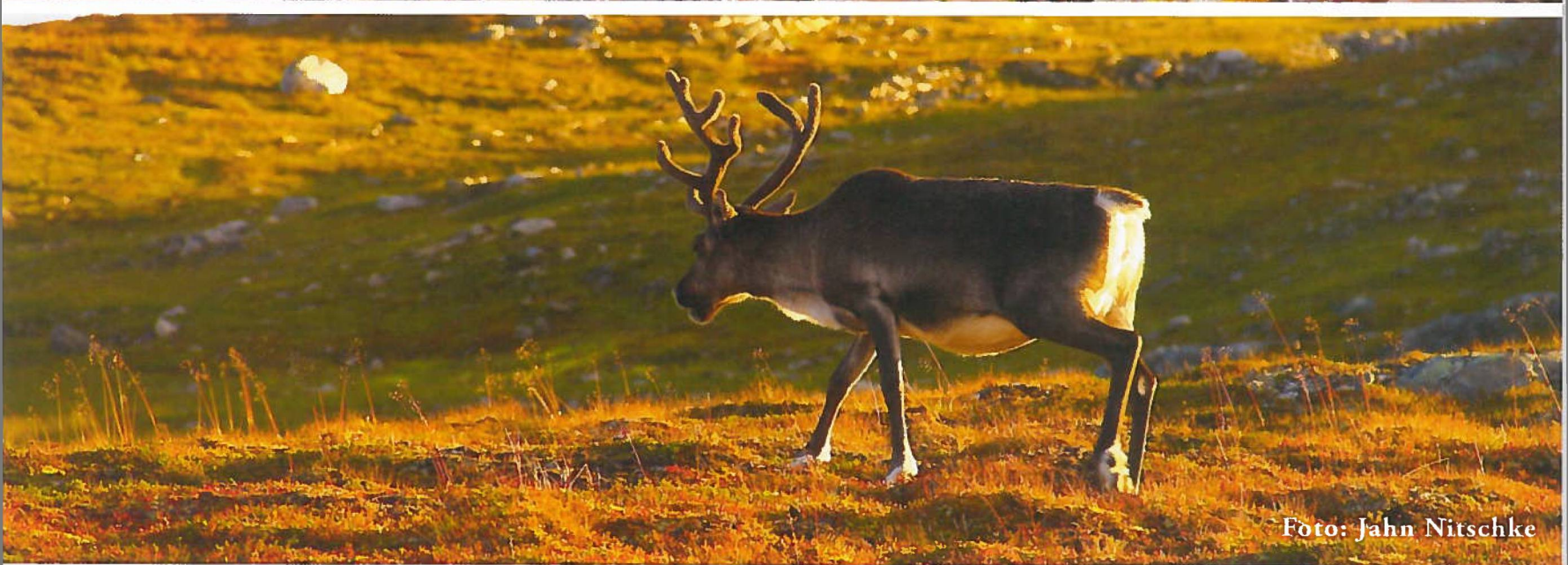


Foto: Jahn Nitschke

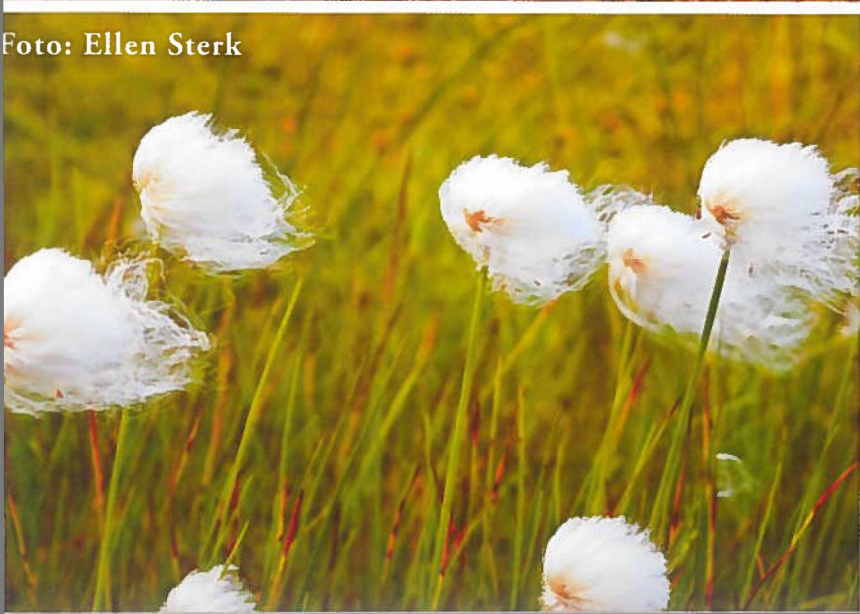


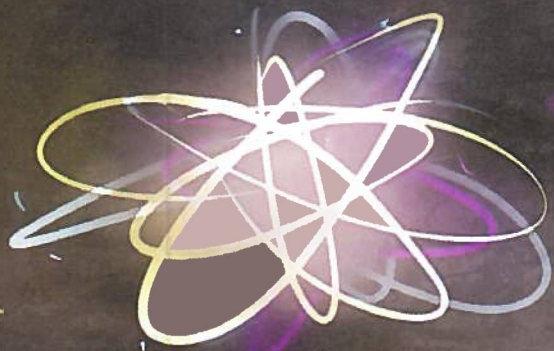
Foto: Ellen Sterk



Foto: Jahn Nitschke

$$|U\rangle_{AB} = \sum_{i,j} c_{ij} |i\rangle_A \otimes |j\rangle_B$$

$$p = \frac{h}{\lambda} = \hbar k$$



$$\hat{H}|\psi(t)\rangle = i\hbar \frac{\partial}{\partial t} |\psi(t)\rangle$$

$$n = n \frac{h}{2\pi} = n\hbar$$

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Ta kontakt og finn ut om vårt annonsetilbud.

redaksjon@utropia.no

$$\Psi = \sqrt{p} \sin(\dots)$$



$$p = \sum_i w_i |\alpha_i\rangle \langle \alpha_i|$$