GRADUATE

2016

DEPARTMENT OF PRODUCT DESIGN

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Aluman VOI

Gunnar H. Gundersen Head of Department

It is with great pride and joy that we present this year's graduating classes to you. As the department of Product Design, we feel privileged to have worked with these exceptional young people. We have followed their progress as individuals and as designers for three and two years respectively. It has been an inspiring journey to witness. In which we met with a fantastic, dedicated, wise, funny, hardworking and ambitious group of students.

In this graduation catalog, you will see design projects that illustrate an incredible variety of interests, product categories, and materials. This reflects the student's fearlessness in taking on new subject areas. Their courage to push ahead in fields that have been neglected by the design community or by society as a whole. This class proves to us that there is merit in diligent, well thought out design work and the implication that even an insignificant design intervention can change the world for its user. We as a department commend them for this passion and wish them well in their future endeavors.

Dear students, as your teachers, lecturers, technicians, and administrators we wish you all the best of luck! We know you will make a difference out there. We sincerely hope to hear from you in the future. Keep in touch with us through the Alumni Network, so that we can celebrate your progress with you not only today but in many years to come.

Remember these names and faces, because they will help shape our future tomorrow.

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Bachelor Product Design

competence in the handling and applying of aesthetics, mechanics, materials and concept development as facets of product design. In using design methodologies the students gain access to explore the role that the potential product may

Our students explore what design is, possible approaches, and how it influences us. In the students draw on a multitude of approaches to perform their design explorations.

Providing space and order on the city bus in Oslo

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Oslo is one of many fast growing cities in Europe. Public transport is trying to keep up with the growing needs, but it is not easy to fulfill every passengers wants and desires. The passengers want to make room for everyone. However, it is not easy to help when the bus is filled at apparently maximum capacity, and you do not know where or how to move to make room. concept is based on the user's own opinions and needs, gathering through interviews and observation. Get on the bus, travel, and get off the bus. No guilt, no insecurity, no instability. It should be that easy. With this solution, it can be.

Many commuters feel this frustration and hopelessness every day, travelling between work, school and home. The ideal situation would be that the passenger easily could find a spot to stand, without being in the way of the other passengers. The woman in the wheelchair and the man with the stroller should be able to get on the same bus as the rest of the commuters after work. The elderly woman and the teenager with the broken leg should also easily get the seat they might need. A public transport with room for everyone can be possible, with design made for change.

This concept can provide order in an otherwise chaotic environment on the city bus. This solution suggests that the majority of the passengers will be standing on their feet, so that the minority that really needs to sit can. When you are standing up, you are creating more space than when you sit. In addition, if you know where you should stand to make room, you feel more secure and relaxed. No more moving around at every bus stop. No more leaning on the person next to you because you do not have anywhere to hold on. The support comes in a form of a short wall that the passenger can lean on. This is designed with support for the back, made to fit the majority of the passengers. The support wall is placed so that the passenger stands turned in the direction of the road for the best possible comfort and stability. The

A public transport with room for everyone can be possible, with design made for change



Sofie Blattmann +47 932 65 934 sofiemblattmann@gmail.com



How to use your smartphone smarter

In the last 10 years cellphones have become smarter, faster and gained access to the internet everywhere you are. Smartphones, used to belong to a privileged niche group, is now something everyone owns and everyone is hooked on, due to social media. When was the last time you went an hour without looking at your phone?

Research shows that the average person uses their smartphone 150 times a day. Of course this does not apply to everyone, but most people can relate to this, and it's an increasing problem. Direct consequences of using the cellphone too much is that the user becomes more distracted. Being distracted can in the worst case lead to traffic accidents. Indirect consequences is loss of long-term memory because of the extreme amount of information the brain is fed every day through our smartphones.

In this project the main focus has been the mental health issue of distractions, which can both lead to unhappiness as well as damaging the long-term memory. The goal of the project has not been to stop people from using smartphones, but to raise awareness and create a tool that makes it easier to use the smartphone less but more considered.

A user oriented design process conducting interviews, testing prototypes and participatory observation led to what can be a part of the solution. With a multifunctional tray that gives the user a natural place to leave the phone. The tray is connected with an application that lets the user set goals and compete with themselves or others. This reduces the excessive smartphone use at the same time as the users save money for their own preferred causes. The user will obtain better focus as well as a happier and healthier mind that will lead to better life quality both socially and mentally. The brain is fed an extreme amount of information everyday, that eventually can damage your long-term memory





+47 957 27 356 lund.viktoria@gmail.com www.viktorialund.com



Sleep quality with focus on aesthetics and durability

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Idyll is the result of a collaboration with Jensen, a bed and mattress manufacturer based in Svelvik, Norway.

The task was to design a furniture series of accessories, which helps to sharpen and clarify Jensen's identity as a Norwegian company with focus on quality and comfort, with solid and honest materials. They wanted a new collection with a clearer Nordic characteristics and clean lines, which could help create a common theme in their line of furniture. Therefore it was important to focus on the product's values, which had to reflect Jensen's vision and identity. The product's features also have to adapt to the users needs to give an increased sense of ownership and usability.

The headboard is built up of horizontal ash boards with four vertical ones holding it together. The spacing between the boards gives room for mounting nightstands or pillows. The nightstand and additional pillows can be placed according to your needs, letting the user give the furniture their personal touch. All functions and materials for both headboard and bedside tables are made visible. This can make the product easier to understand and use. They have also deliberately adopted the same details. This creates an easily recognizable product identity.

Idyll refers to a feeling of pleasure, joy and harmony, in everyday life. The name Idyll point out all the good qualities of the product, as well as Jensen's own visions. Idyll suggests a lighthearted carefree mood of peace and contentment, or suggests an inconsequential romantic affair







Andrea Bue +47 412 11 521

+47 412 11 521 info@andreabue.no www.andreabue.no



Wheely 360° - Encourage movement and flow while traveling

We are living in a world where people become more environmentally aware every day. Human transportation has a huge effect on our environment. There has never been more focus on developing better vehicles based on how it effects the environment. The government in Oslo wants to restrict all use of cars in the city centre. How will this affect how we travel in the future?

In the recent years, the market of new electric vehicles has increased enormously. There are many different options to choose from. Segway, hover board, air wheel - just to mention a few of them. However, most of these are mass-produced in China, as brandless products. On several occasions there has been up to three different logos on the exact same product.

Wheely 360 is a electric one wheel designed to give the user a feeling of snowboarding on bare ground. With Wheely, getting from A to B does not have to be boring and inactive. It is an experience in itself- an experience of body control, dynamics and flow.

The goal with the project was to create a product with a solid brand and a good design, targeting curious youths, who are searching for fun and excitement. The research also discovered that people in general have a negative perception towards the use of electric 'one wheels'. People using these products, express a certain laziness. Having this in mind, Wheely 360 is a product of movement. It requires you to improve your balance and strength to become skilled. The whole body is required to rotate the board around the wheel. By activating the user's core muscles, we believe that the perception of laziness, due to the static posture, is no longer an issue. You can drive sideways, frontways, turn and rotate. This flexibility creates an agility few other similar products can match.



"



Electric 'one wheels' gives you a static posture that's makes you look lazy

- Man (45), from Turistforeningen









Filip Cassergren 47 473 73 969 assergren filip@hotmail.com

Daniel Kvebæk

47 918 09 827 daniel.kvebaek@gmail.com www.danielkvebaek.com





Anja Mykland

47 416 32 987 myklandanja@gmail.com

A different way to get around in urban areas

The evolution of man derives from man's curiosity and man's ability to master seemingly impossible tasks. Human beings persist to re-invent the term impossible by mastering these tasks. Sports are a good evidence of this.

The surfboard originates from ancient Hawaiians. It was used in deeply spiritual affairs from the art of riding waves, to praying for a good surf. Today, you find a wide range of its 'relatives', introducing tricks and movements their creator could never predict; Skateboard, Snowboard, Longboard, Wakeboard etc... As a continuation of this, the project has developed TrailBlazer - The first railboard made to surf rails. Living in the capital of Norway, the tram is a regular sight. It's infrastructure spreads about downtown Oslo and its standards are high. This project replaces the traditional views on using tramrails to modern scenarios with railboarders trailing the tracks. Rather than city routes and commuters, imagine racecourses and competitors. In here lies new challenges, possibilities, and the emergence of a new sport.

Those who do not move. do not notice their chains

- Rosa Luxemburg







Thomas Ertzgaard +47 457 86 146 thomas.ertzgaard@gmail.com IG @Railboarder



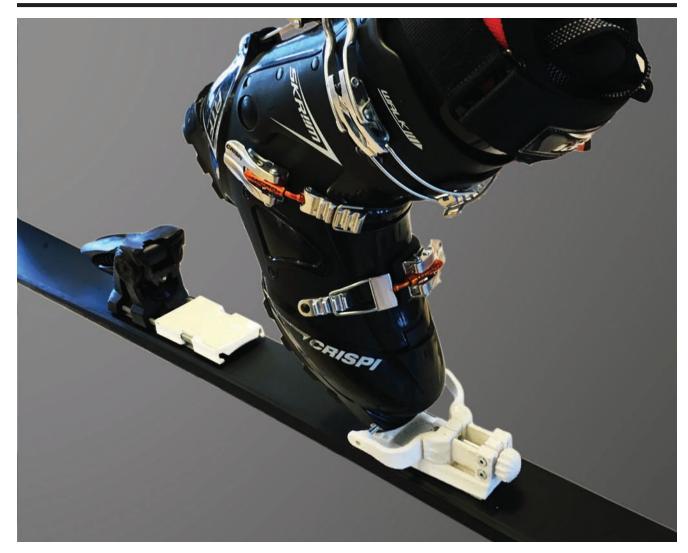
Increasing the experience of backcountry skiing

For the last 20 years it has been a renewed era for skiing outside the slopes. Increasingly more Norwegians seek the outside of slopes or a creek by using a setup of bindings and boots developed for both hiking uphill and downhill skiing.

The Project is based on feedback from experienced ski hikers and their experiences with today's products. The products in this task are separated into two groups: Techfit and frame bindings. With different problem areas: The techfit in downhill skiing, and the frame binding in hiking upward. Skiing outside the slopes usually contains many hours of hiking, and just minutes of downhill skiing. Because of this the Techfit binding is popular and the project has focused on solving its problems in regards to downhill skiing.

The main focus for development in this project is a toe piece binding with the focus on a safer and more predictable release force mechanism. To keep up with existing products it is also important to keep the weight to a minimum and maintain the rigidity of the binding. Today's frame bindings are heavy to carry and the frame suffers from torsion that affects the users endurance. The techfit binding has barely any torsion, a low weight, but an unpredictable safety release force due to being static.

By focusing on development of a new binding toe piece, compatible with a techfit-boot, this project ended up with a solution that allows the boot to have a buffer in movement until it releases while skiing. The key to this solution is the right use of materials. They need to enable the contact points between the boot and the binding to expand and compress in harmony with the flexing in the skis caused by the substrate. Improvements that ensures the backcountry skiing experience







Anders Fossheim +47 977 22 801 anders.fossheim@hotmail.com



Easy transportation and navigation inside hospitals

Janus is a multifunctional, autonomous-guided vehicle for users at hospitals. The vehicle ensures to transport the users to their desired destination. By adopting modern technology the product is able to orient itself, as well as maintain the users and others safety by stopping or driving around any obstacles on its journey.

With these possibilities the vehicle encourage physical movement shortly after an operation or bed rest. By drawing inspiration from the human anatomy, natural shapes and colors Janus can provide a calm and safe feeling in a rather stressful environment.

Several places in the world you'll find large hospitals, larger than we can envision. New visitors may find it difficult to locate their desired destination, such as a doctor's appointment in an unknown department. The challenge can increase if one is stressed and has little time before the appointment, if one is in bad shape or is a concerned relative who wants to get as quickly as possible to a loved one.

With this issue as a basis, a group of engineering students at the Anhalt University of Applied Sciences are currently working on simplifying the users conveyance in hospitals by using newer technology. Through research, and in cooperation with the Anhaltstudents, this project aimed to design a user-friendly product, which includes several users with different needs.

Janus is constructed and designed in order to enable patients or visitors to get from A to B without having to depend on being assisted by someone else. Manual steering devices maintains the users freedom of choice and sense of control. The vehicle is equipped with a seat that is easily foldable and an adjustable footrest, which can be pushed forward for additional space. These features allow the user to choose how he or she wants to be transported; standing on the footrest, sitting on the folding seat or walking with the ability to support themselves on the armrests similar to a rollator.



Physical or mental weariness can lead to difficulty understanding signs at hospitals

- nurse





Anniken Sunde Frich 47 908 32 037 nniken.sf@gmail.com www.annikenfrich.com



Andrea Elisabeth Lindberg +47 901 86 561 aelind2@gmail.com



Izelin Tujunen

+47 932 19 970 izelintujunen@gmail.com www.izelintujunen.com

Increasing awareness about outdoor air pollution

Air pollution has a negative effect on your health, even at relatively low concentrations, and is therefore relevant for Norwegian cities and towns. Every year this causes more than 400 000 premature deaths in Europe. Despite this fact most people are not aware of the situation and what they can do about it. Awareness of the situation gives you the freedom to choose what is healthiest for you and your environment.

In cooperation with Kjeller Innovasjon and the Norwegian Institute for Air Research the project's task has been to find a way to communicate measured data and information about air pollution. The main focus is to reach out to children, parents and kindergartens. Our solution is a product and a service – a sign and an app that compliment each other.

LuftSkilt is an acrylic sign that shows real time air quality by turning on LED-lights in different colours and levels. The higher the level - the stronger the light. Strategically placed on the entrance door, everyone passing by can notice it and become more aware. The sign leads you on to the app LuftTroll where you can find more information.

LuftTroll is an app that tells you how you can take care of yourself and your children according to the level of pollution. LuftTroll is designed to awaken the child's curiosity and start a dialogue between adult and child. This will start a learning process and will create awareness at early stage.

LuftTroll provides real time measured air quality and a 24hour forecast, helpful push notifications, information about air pollution and gives you advice on what you can do to protect yourself or reduce your emissions. Through quizzes and games you will learn more about the theme in a fun and stimulating way. Curious? Try out the dummy app here: https://marvelapp.com/60068ig



Awareness gives you the freedom of choice. Advice makes it easier to know how to act and how to avoid exposure over time





Olga Gåsland 47 454 05 940 gagasland@gmail.com



Utilization of ownerless furniture through upcycling

Upcycling or creative reuse is the process of transforming waste materials, useless and unwanted products into new materials or products of better quality and for better environmental value. Upcycling can be achieved by changing the expression and/or replace elements to give it new value.

As an environmental friendly approach to upcycling the chair, I have upgraded and retained most of its steel structure and used waste wood to construct the wooden elements and replaced the old ones. In this way, the chair can be used over and over by changing out the wooden parts. Making it more sustainable with easily accessible waste wood materials, which can be replaced if broken. Sustainability is key to reducing the effect of environmental issues and by using more of what is already been made we can save energy from producing new ones.

The result of this project is an upcycled chair that was once unused where the seat and back is replaced with re-purposed wood taken from waste. Recycling materials often degrade the quality and the focus has been to maintain the quality of the furniture and make it better. The modern expression and new value has changed and is now more likely to be used again.









Erik Harmens

+47 902 14 222 ehharmens@gmail.com www.erikharmens.com



Adaptable placement of x-ray detectors

Mobile x-ray machines are used when patients are difficult to move. This might be patients that suffer from physical or mental challenges, and therefore moving them to a new environment can cause them great stress.

Becky is a flexible product for mounting mobile x-ray detectors in different positions. This will improve the x-ray quality, and solve challenges in the user experience.

A detector is placed close to the patient, and captures the rays from the machine creates the picture. Today there are few solutions for placing the detector and giving it support when taking pictures. When taking x-rays, the radiographer needs to step away or leave the room. This can impair the communication with the patient and make them miss out on instructions.

Becky can easily be attached to most stands, at any height necessary. IV poles are available in all hospitals and nursing homes, and can therefore easily be used for this purpose. Mounting the detector to Becky contributes to better pictures while standing upright, but also for horizontal pictures taken in bed. By adjusting the lower support arm you can always make sure the detector is perpendicular to the floor.

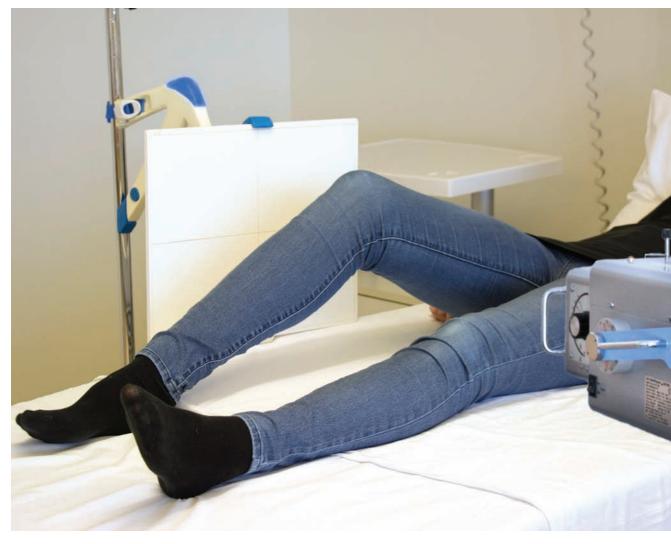
Becky fits different detector sizes, and the detector can be positioned to the preferred placement. We have also integrated a light that changes colours to tell the patient to stand still, or hold their breath. When the radiographer walks away from the patient or leaves the room, the product will still give the patient the communication that is needed.



We need to rely on the surroundings and improvise with objects we find around us to support the detector

- radiographer

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Kristian Hynne 47 995 25 018 xrhynne@hotmail.com



Fredrik Våland +47 473 81 194 fredrik.valand@gmail.com www.fredrikv.no

Creating a future for homeless cats

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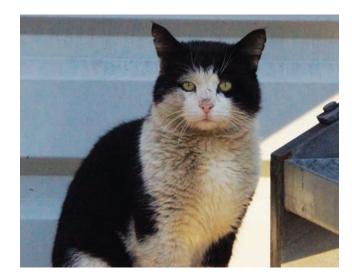
Kattens Fremtid aims to improve the situation for homeless cats in Norway. The focus lies in educating the public and making life easier for the voluntary organisations that work with the problem on a daily basis. The voluntary associations agree that homeless cats are one of the biggest and most prominent animal welfare issues in Norway. There is no quick fix to this situation and we need to understand that change takes time.

Part of the problem is the lack of trustworthy data and information regarding the situation. This makes it crucial to implement a system that allows the voluntary organisations and Mattilsynet to start logging their activity around homeless cats and collecting data.

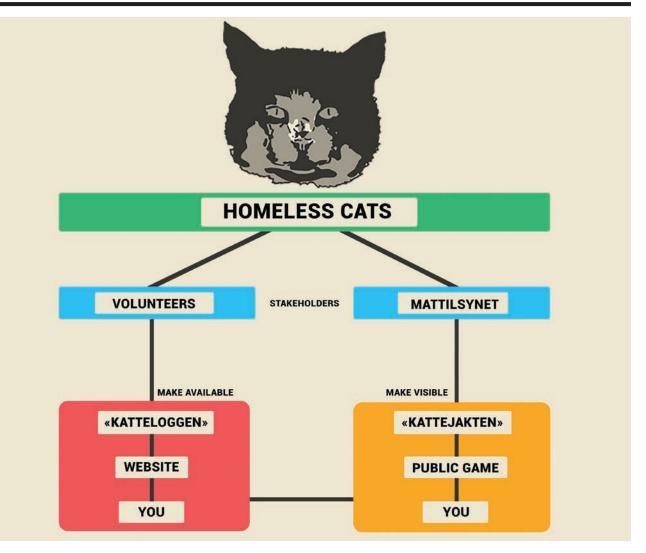
'Katteloggen' is a major communication platform that simplifies this activity and makes communication among the stakeholders easier. This system will replace any existing logging systems that the stakeholders may have. The collected data will be visualized on a website accessible to the public.

To make sure that the website and the data gathered actually reach the public, the social game, 'Kattejakten', is installed in selected districts around Norway. Cat shaped checkpoints are strategically placed in public areas and invites passers-by to take part in the game. The checkpoints encourages the player to find and record as many of the checkpoints as possible, with stories and competitive elements. The incentive is to register more checkpoints than the competing districts.

Each and everyone of us play a major part in the tragic situation that so many creatures face every year. Because so much of the solution relies on a change in attitude amongst the public, the two solutions need one another to reach their full potential. Hopefully this will cause a ripple effect of positive change.



It is thought to be more than 100 000 homeless cats in Norway, and the number is increasing at an alarming rate



THERE ARE 3 16 HOMELESS CATS IN NORWAY

8 **ARE STILL ON THE STREETS**



Anne Marthe Strand +47 467 48 479 annestrand1@live.no



Ida Malene Jacobsen 47 452 31 718 idamalenej@gmail.com vww.kattensfremtid.no



www.kattensfremtid.no

Stimulating the senses for people with dementia

The scent of fresh cut grass, what memories does this smell bring to mind? In your mind's eye, maybe you see the neighbourhood you grew up, or remember riding your bike. Whatever memory that stimuli triggers, chances are it could take you far back in time.

People with Alzheimer and dementia disease have difficulties to recall recent activities in their lives. But the long-term memory is well preserved; they just need some help to trigger it. For people with dementia disease, smell can be a powerful tool to evoke these memories. From the persperctive of a dementia sufferer, sharing memories could strengthen the sense of identity and create joy and belonging.

The project explores the use of scent combined with images and text to provoke memories as a communicative tool. People living with dementia are able to sense how people interact with them. Just sharing that moment is valuable, even if the response is just a smile. Taking a moment to enjoy a smell together and maybe talk about past times positively could affect the persons well being.

The project has been developed by observations and through workshops with the residents at Orkerød dementia hospital.

Among the five senses, smell is the strongest and most closely linked to our memory



Kaja Bystøl Jacobsen +47 959 49 596 kajabystol@gmail.com



Time management in a one-person household

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Increasingly more people live alone. The average Norwegian household has decreased from 3,27 people in 1960 to 2,20 in 2015 (ssb.no). Almost 50% of the inhabitants of Oslo live alone. With this rise of one-person households problems are coming to the surface.

A person living alone is in charge of all of the chores in the household.

Of all of the chores, doing the dishes are looked at as the most boring one. The root of these problems lay mainly in how we look at dish washing. In comparison to cooking where you have a delicious meal to enjoy after you are done, doing the dishes is time consuming and does not feel rewarding.

The core value of this project is time management. Through user observations, a user journey was established around the meals different sections, focusing on dish washing and the logistics surrounding it. 'Easy cooking' is designed to make the amount of dishes you have to wash smaller but also to do the cooking for a one person households easier. Easy cooking helps you to make food without making too much or too little. Dishwashing is boring and I feel I don't have time to cook what I want to eat







Thea Carolina Jager +47 454 61 921 t.jager@live.no

Anti bike theft system for tomorrow's cyclists

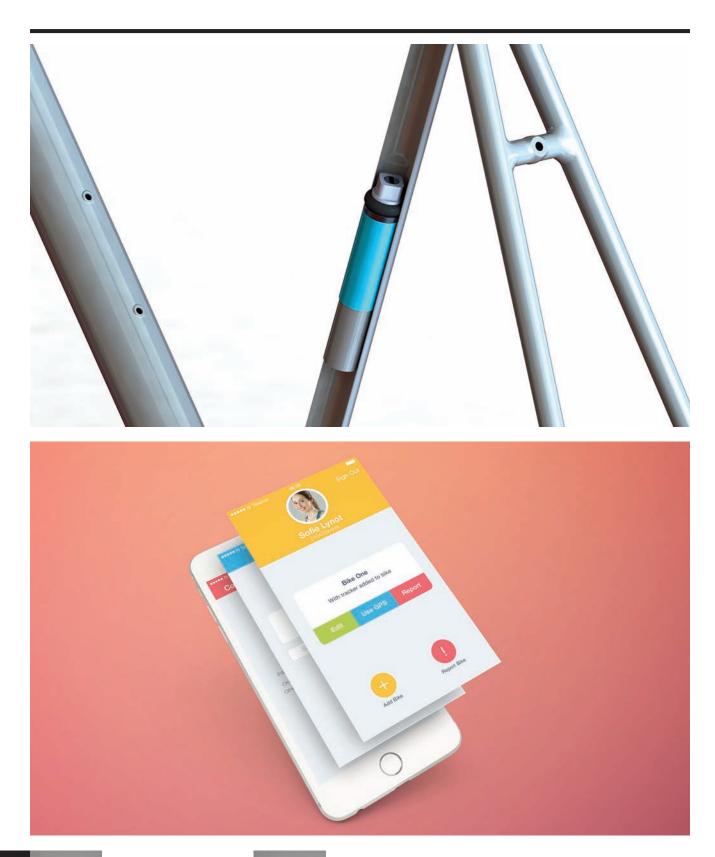
Bike theft is becoming an increasing problem in Norwegian cities. Over the last 4 years' bike theft has increased by almost 50 % in Oslo. Making the capital the home of 1/3 of all reported bike thefts in the country. Politicians and public authority are encouraging the population to start using bikes for their personal commute and decrease the use of cars for personal transportation. The biggest reason for why people do not choose a bike as their go to type of personal transportation, is the fear of it getting stolen when its parked.

The project's goal is to reduce the chance of the user's bike getting stolen. The focus during this project has been on improving and developing new systems to support the Norwegian police with collecting more evidence and leads in the investigations of all the stolen bikes. Finding ways that would make the bikes less attractive for the thieves has also been a part of this process.

The solution is an app and a database (www.nsdb.no) where all the information about the bike and the user would be stored. When a bike would get stolen, the user would only have to use the app to quickly report the bike stolen and also automatically submit the all needed papers for insurance and other claims. To make the bikes less attractive for the thieves, a GPS module would be installed inside the frame of the bike. The NSDB-logo would have a preventative effect by being placed easily visible on the frame of the bike. The GPS-module communicates through NSDB with the user and the police if something isn't right. The module shall track the location of the bike when its not being used by the owner.

Locks has no use. Put a GPS in the bike, and send the coordinates to the police

 $-\,comment\,from\,reader\,of\,Osloby$





Lars Kvinnesland +47 908 19 082 lars@cilo.no www.cilo.no



Elias Dahl Olsen

elias@cilo.no www.cilo.no IG @eliasolsen

Flexible everyday objects for extended product life

Do you ever get tired of the interior objects you have at home?'Pusle' and 'Stable' gives the user flexibility in creating various expressions. In this way the user don't have to buy a new product to get the feeling of owning something new, and the products life can be extended.

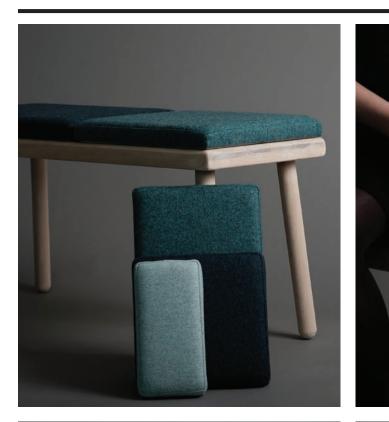
Extending the product life has been an important part of the project. This has been achieved through various methods to increase consumer-product attachment (CPA). By getting the user to interact with the product, the consumer-product attachment can be increased. We attempted to achieve this by giving the user a creative challenge by personalizing their product to get something unique.

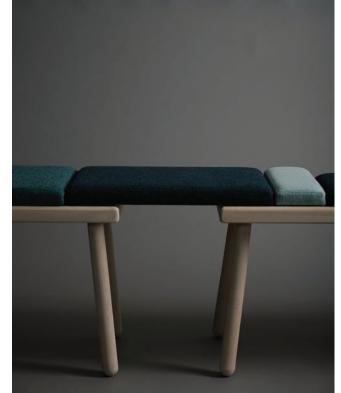
'Pusle' is a bench inspired by puzzle and playfulness around old toys. It has a Nordic expression, and stands out as a playful object. It has cushions in different colours and sizes. You can add and change the cushions as you like, and use them to combine multiple benches. Choose the colours and combinations that suits you.

'Stable' means stack in Norwegian, and that's exactly what you can do with this candleholder. Stack the different parts on top of each other, and organize it in new ways for different occasions. Combine sizes and colours to personalize your candleholder. It can be used both ways, and suits both candles and tea lights.

A big thanks to Magnor Glassverk, Kvadrat Textiles and Østlie Møbelservice.

Any of our interior can turn into yours





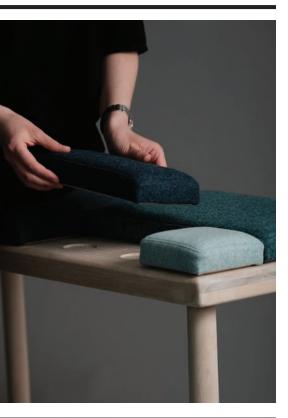


Siri Line 47 907 39 229 ontact@studiofoy.no G @studio.foy



Guro Sørbø Midtun 47 464 25 714 ontact@studiofoy.no

vww.studiofoy.no





The joy of everyday food

The everyday pleasures, that actually happen right before our eyes, those are the ones we take for granted. We often forget to enjoy life as it is. Today's society is too focused on materialistic things. We often forget to take a moment and relax, and enjoy life as it happens.

This project has designed an object that brings in the essence of Norwegian everyday food, and creates awareness in the preparing of this type of food in everyday situations. By looking into the traditional food Norwegians have been eating for decades, the project focused on seasonal food typically eaten in the winter season.

Food is something that creates togetherness, memoires and tradition. KOLLE is a porridge bowl inspired by the way we used to eat porridge from the old days and the different ways we eat it today.

The bowl comes in a set of two. One porcelain and one wooden bowl. The porcelain bowl is glazed to remind you of the traditional topping, such as cinnamon, butter and sugar, and the more modern topping like different berries and fruits, as there are many types of porridges eaten today. The additional wooden bowl is created to encourage the user to touch and feel the bowls texture. Its intended to be placed underneath the porcelain bowl to conduct heat away so that you can take your favourite porridge, soup or stew where ever you want to eat it without burning your hands. KOLLE is a porridge bowl inspired by the way we used to eat porridge from the old days and the different ways we eat it today







Maria Løland +47 938 00 765 maria.loeland@gmail.com



Making theatre more accessible through communication

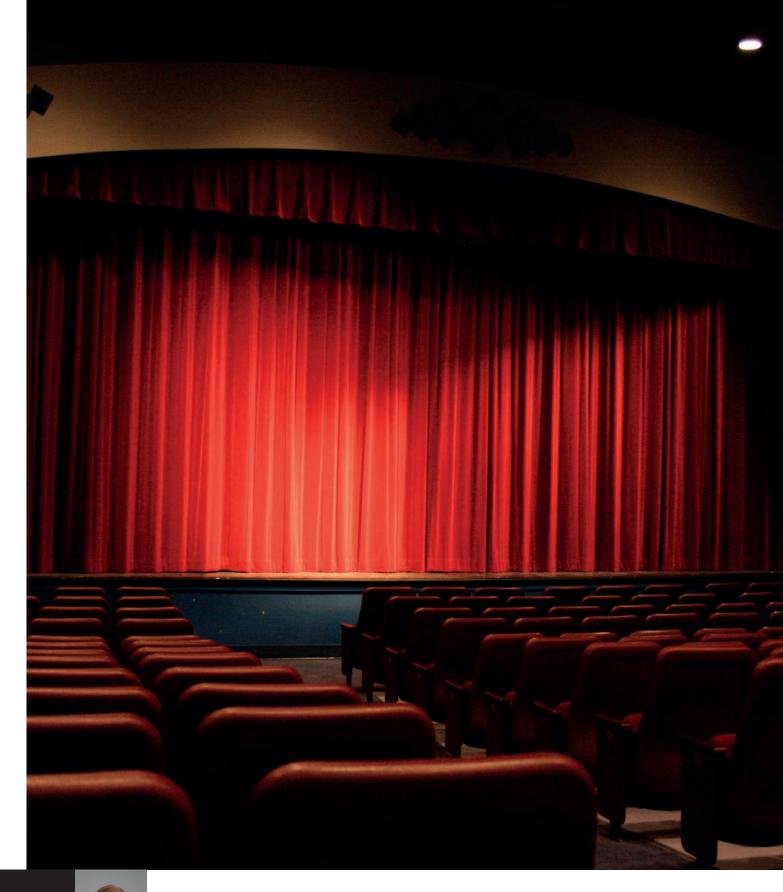
Art and culture enrich our lives, it's a reason to come together and share an experience. These experiences should be as inclusive as possible. Still people with disabilities feel that they're prevented from taking part in cultural events because of a lack of accessibility.

Oslo has the widest range of cultural events in Norway. But compared to other cities in Europe, Oslo is far behind when it comes to accommodating people with different disabilities. The main challenge is to improve communication between cultural institutions and potential audience, creating awareness of the needs and level of current accessibility.

How to develop the accessibility depends on the art form and the strength and weaknesses of the different cultural institutions. In efforts of narrowing down the field, the project has focused on theatre. An art form which challenges several disabilities. The storytelling is both visual and audible, and with loss of senses parts of the story may be lost without an interpreter.

The project aims to develop a strategy for Det Norske Teatret in Oslo to help them create a more inclusive experience for people with disabilities. Looking at the whole journey, from the purchase of tickets and experiencing the show, to after the show as the whole theatre experience. Increasing the communication between the theatre and the audience is crucial to better the accessibility. I don't go to the theatre because of the lack of working sound systems. I can't hear what they're saying

- $person\ with\ impaired\ hearing$





Malin Medin +47 924 58 656 malinbm@online.no

Designing for the use of Norwegian grown Sitka spruce in furniture

"

Applying Norwegian grown Sitka spruce in furniture production in Norway would be an important step to saving some of the endangered plant species in the Norwegian coastal flora. It would also utilize the unique material properties of the sitka spruce in a suitable product area.

Originating from the west coast of Canada and Alaska, Sitka spruce has been planted extensively in the coastal regions of western Norway as a key component in expanding the area and volume of Norway's timber production. Today Sitka spruce poses a major threat to the coastal flora as it is expanding, and imposing on the natural habitat of several endangered plant species.

The tree has one of the highest strength/weight ratios of all wooden materials, but is widely regarded as an inferior construction material due to its low density. Taking in to account both environmental and production factors, and the intrinsic properties of solid sitka spruce wood, one could argue that applying sitka spruce in a piece of furniture produced in Norway would be very beneficial.

The stackable chair "Sit" utilizes the sitka spruce's unique strength to weight ratio, in a product where weight and strength is key factors to create a functional stackable chair. The production uses traditional woodworking in combination with modern laser cutting technology. This produces the best results when it comes to weight, strength and the ability to stack many of chairs together.



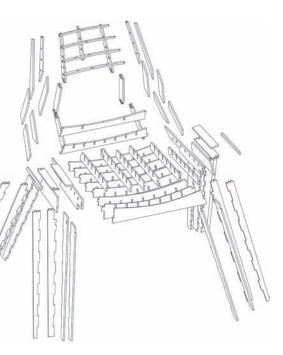
Today Sitka spruce poses a major threat to the coastal flora







Jone Myking +47 483 66 553 jonemyking@gmail.com





Improving the user experience of the cervical cancer program

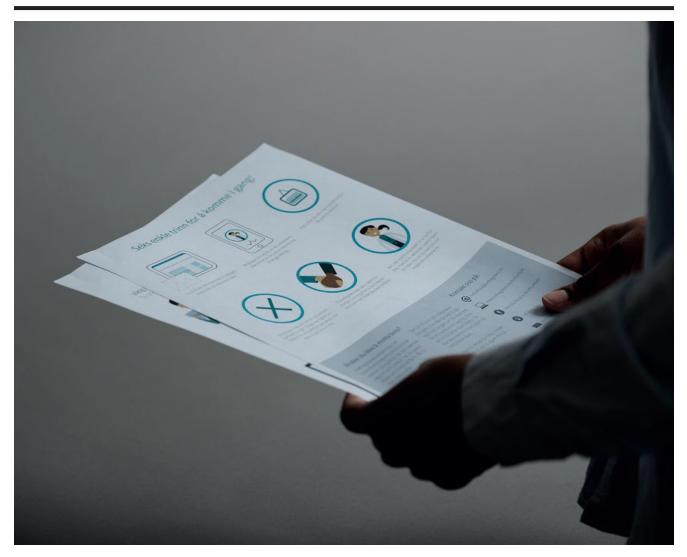
Numbers from The Cancer Registry in Norway shows that cervical cancer is the third most common cancer in the country affecting women between 25 and 40 years. The cervical program encourage women to do a cervical screening every third year starting from the age of 25. Recent numbers from The Norwegian Cancer Registry shows that 40% of young women between the ages of 25-29 do not follow the cervical application as recommended.

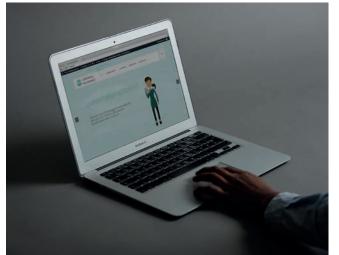
The app is an extension of the program and aims for the users to feel safer by following the journey step by step. The app also makes it possible for the users to pinpoint and express their feelings and experiences to evaluate the program. In this way, new users will get expectations based on real experiences from women who has already completed the program.

This project has investigated how to encourage younger women to complete screenings to reduce future cases of cervical cancer. The user journey has been changed by looking in to their experiences, behavior, and also cultural norms.

The solution suggests that 'Livmorhalsprogrammet' should be a more connected service which would provide the user a meaningful journey through the program. The program consists of three parts focusing on experience, empathy and safety. The journey starts with the user receiving an invitation letter. The letter contains information about the cervical cancer program, and also invites the user to join an yearly social event. Every letter has a unique code which connects the user to the website, where they will get more relevant information about the program. By signing in, the users will also get access to an app. This contains visual illustrations on how the procedure is completed.

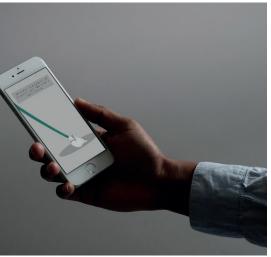
New users will get expectations based on real experiences from women who has already completed the program







Hamy Nguyen +47 480 77 571 hamynguyenn@gmail.com www.hamy.no



Easier access to the appropriate mental health care

Mental health problems are one of the greatest health challenges facing the Norwegian society today, and according to the World Health Organization it will probably be the most important health issue in Western countries in 2020. Despite the fact that we are starting to become more open about mental health issues in Norway, many try to deal with their mental health problems on their own for a long time. When they finally seek help, they are often in need of emergency care.

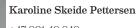
Through conversations and interviews the target group has been the key influence for shaping the result of this project. User journeys and various forms of research have also been essential. Doctors, medical students, school nurses and psychologists have been used to find out how the system works. Talks with patients to learn from their experiences, and to hear their thoughts on how the mental health system functions today, have also been crucial.

The finished product is an app that contains a complete list of everyone that offers mental health care in Norway. Psychologists, psychiatrists and therapists, both private and public. In the app you can easily search for the correct help based on various parameters – such as area, issue or therapy form. The app makes it easier for those with psychological issues to get the help they need. People have little or no knowledge about what kind of help they can get, and how to get it. They need help, to help themselves.

My doctor didn't know any psychologists in my area. Instead he gave me a list with countless names of different psychologists for me to call







+47 901 49 949 karolinespettersen@gmail.com



Creating safe spaces for bikes in public urban areas

Environmentally friendly transportation is vital in a world facing environmental challenges. In Oslo there is an increasing number of people who are interested in using bikes as an alternative to driving. Accordingly, the city has to adapt to and facilitate for the needs of the cyclists, in order to match their wishes for flexibility and freedom.

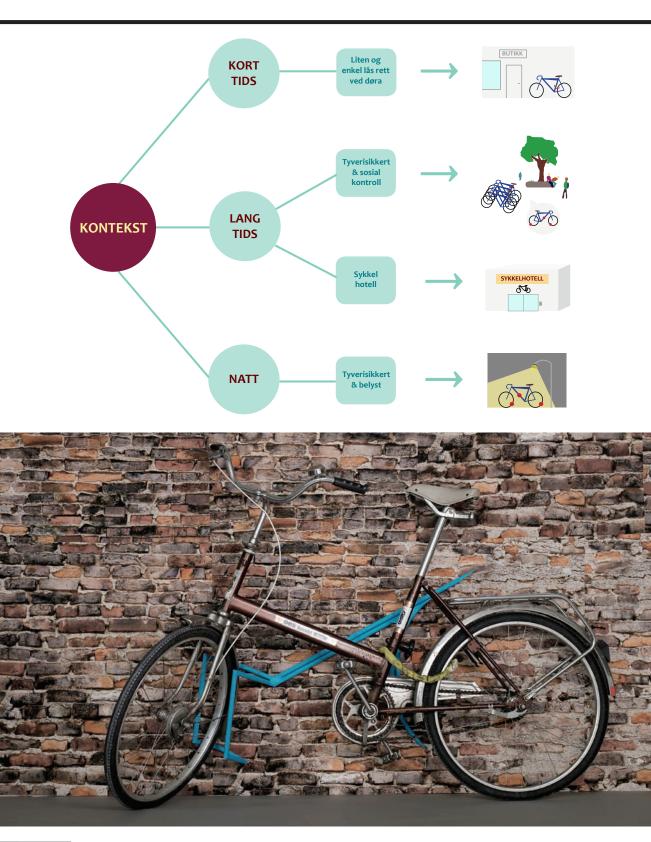
The focus of this project has been on bike thefts and how to prevent them, as the number of cyclists increases. Through statistics, qualitative methodology, design processes, experimentation and perspectives from Human Centered Design, the project has found a high demand for safer spaces for the modern cyclist to lock their bikes.

Several observations show that cyclists do not secure their bike to a fixed object when parking for a shorter period of time. This leaves a great opportunity for the thief. Due to this, one of the solutions is a bike rack to be attached on facades of city stores, cafes, pubs and the like. StreetSmart is a space-saving bike rack which is designed to be both intuitive and easily integrated on walls in the city landscape.

This project has investigated several possibilities to prevent bike thefts, and the overall strategy is to look at bicycle safety holistically, which exceeds the mere physical bike racks offered to cyclists today. Amongst the solutions discovered in this project has been to look into possibilities for social responsibility. product attachment, and the use of social media and campaigns. As an example, the project has developed a hashtag campaign to provide a platform where cyclists can influence each other and share experiences on bike security in Oslo. The goal is to make an online community in which the cyclists can become aware of how to secure their bikes, and to get more use out of the public parking spaces provided in urban areas.

The city needs to adapt and facilitate for the needs of the cyclists







Sunniva Prytz Sandnes 47 474 42 437 unn.p.sand@gmail.com



Motivational training for children with EDS

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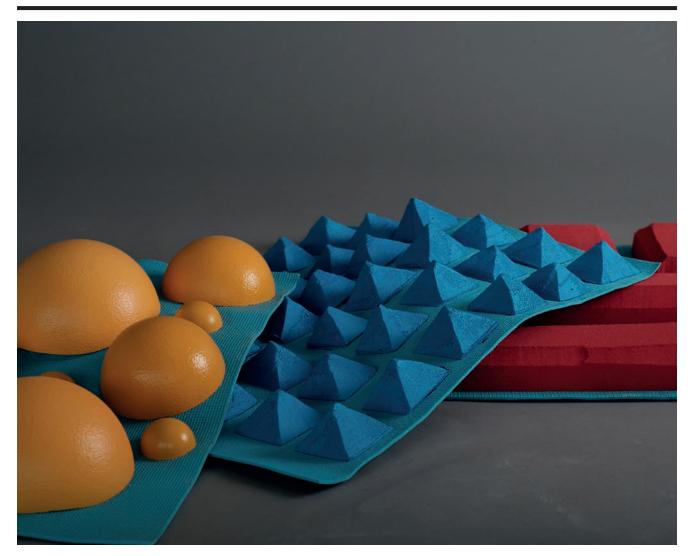
EhlersDanlos Syndrome is a relatively rare and hereditary connective tissue disease. People with EDS have joint hypermobility, overstretching skin and tissue fragility. The skin and unstable joints as seen by a person with this disease can often have much difficulty with simple physical work like lifting, pushing, pulling, etc. People with EDS also tend to become tired quickly, accelerate bruising of simple strokes. It is very important for children with EDS to develop their basic motor and physical abilities at a young age, to slow down the development of the disease.

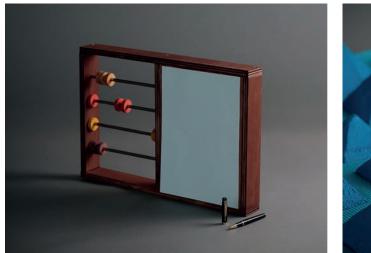
Many children with this particular syndrome constantly experience pain in joints and muscles. This causes them to be unmotivated and stay away from physical activity, which again causes even more pain. When they take the initiative to play, this often causes them to be more active in a less tiring way.

Therefore it is important that the workout is motivational for the children. As a solution to this. the project ended up with two objects made to be used together; a exercise mat and a blackboard for mounting on the wall. The exercise mat makes the workout more motivating and fun for kids with EDS. With the shapes that are coming out of the mat, the child's senses, balance, coordination, motor and physical conditions will be increased and developed. The blackboard/tablet will visualize the progress for the children when they draw and count the number of times they have performed the exercises. This will help them in understanding their progress. The product's differently coloured parts will contribute to a colourful workout session that the children will not get tired of.

When my child avoid exercise because of pain, this leads to even more pain the next time

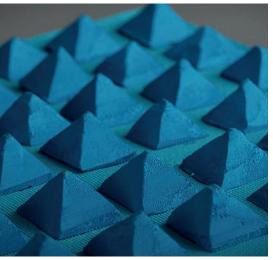
- mother of child with EDS







Serhat Turan +47 400 58 108 serhat-t@hotmail.com



Reducing air pollution in Cracow

"

Cracow in Poland is among the most polluted cities in the world. A target action in this project has been to encourage people to replace old heating systems and to stop heating by solid fuels. Coal production and consumption in Cracow has been playing an important role in community's existence for many years. That is why any attempt to stop the consumption has been unsuccessful.

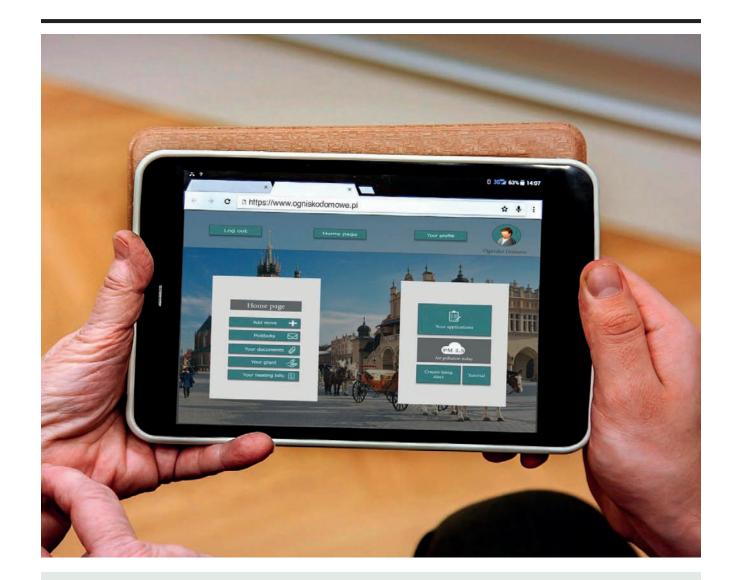
The government has implemented a strict ban on using solid fuels. They also provide various means of funding to support the transition. Still there are 24 000 Cracowians who use coal for heating homes every day and cause air pollution in this way. Most of them are senior citizens who are either unwilling or incapable of removing old heating systems.

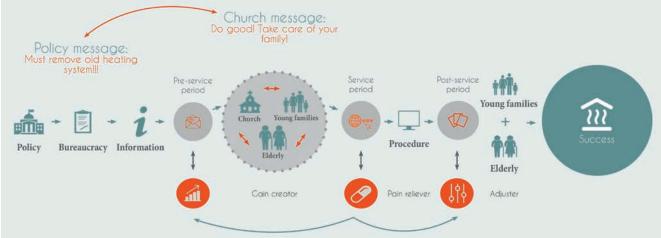
This project presents a principle which encourages Cracowians to replace old heating systems by making the process of replacement feasible and meaningful for the user. The outcome of the project is a threepart concept: a letter which cues the user to take an action, a website which navigates the user through the process, and a board game which helps the user to adapt after the replacement.

In 2011, 87.5% of Poles identified themselves as Roman Catholics. 65% of Polish believers attend church services on a regular basis. The intention is to spread the information about the need of replacing old stoves through the church. Receiving information from authoritarian institution changes the tone and meaning of the matter for the user. While government demands to remove old stoves, church asks to do the right thing. The principle focuses on family's values: taking care of elderly, improving living conditions, helping each other and securing safe future for the younger generation.



There are 24 000 Cracowians who use coal for heating homes every day and cause air pollution in this way







Gintare Visniauskaite +47 465 95 546 visniauskaite.gintare3@gmail.com

Designing for sustainability and product longevity

The overconsumption of the earth resources has led to a great climate and social challenge. The UN climate report notes that the key to solving these challenges lies in changing our consumption habits. We must, among other things, "select products that have good quality and are produced in a sustainable manner" (United Nations Association).

The prosperity in the western world has led to a large increase in consumption. We replace fully functional products with new equivalent products. It is important that we as designers are taking a responsible role by focusing on sustainability and product longevity.

How can we prolong product longevity? Why do we buy new products? And perhaps even more important; What are the reasons for retaining a product? The product's visual appearance and functionality plays an important role, but in addition to this, material tactility, memories and associations related to the product has a great value.

SITT is a flexible lounge chair. It follows your movements whether you want to sit back and relax or lean forward to enjoy dinner or play games with friends at the coffee table. It is made of natural renewable materials of high quality and durability. Norwegian households buy at least twice as much goods and services today as in the early 1980s

- Statistics Norway, SSB.no







Department of Product Design

workshop based processes, user involvement and iteration on functions, materials and processes. This is in order to develop solutions for a

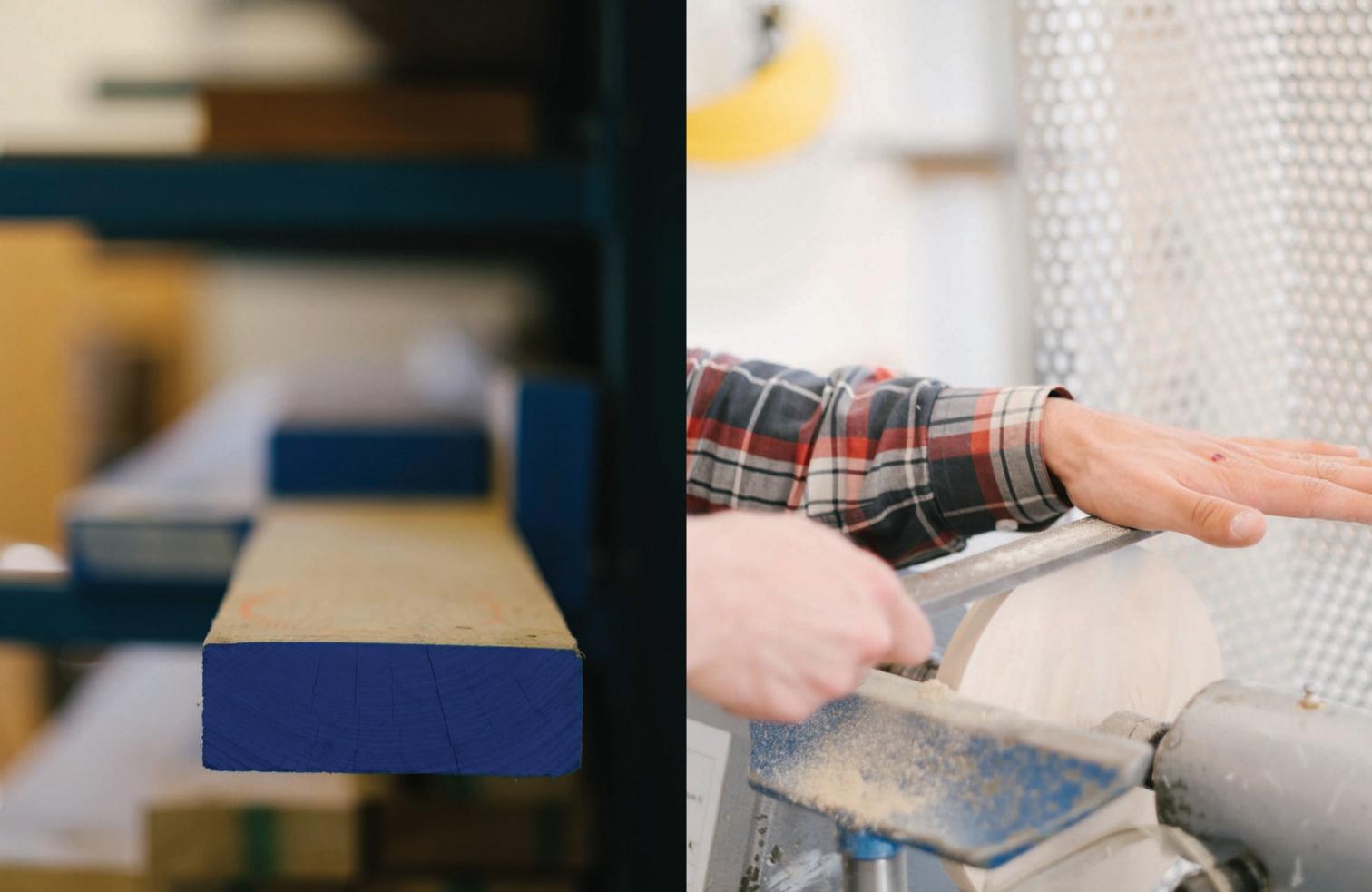
Through problem-based learning, the department emphasizes the use of design thinking as a tool in every design process from service design to industrial design.













highly skilled professionals in all kinds of design related work. Based on their thorough design understanding and holistic thinking they will be able to build bridges between those with an in-

Transportation of patients with infectious diseases

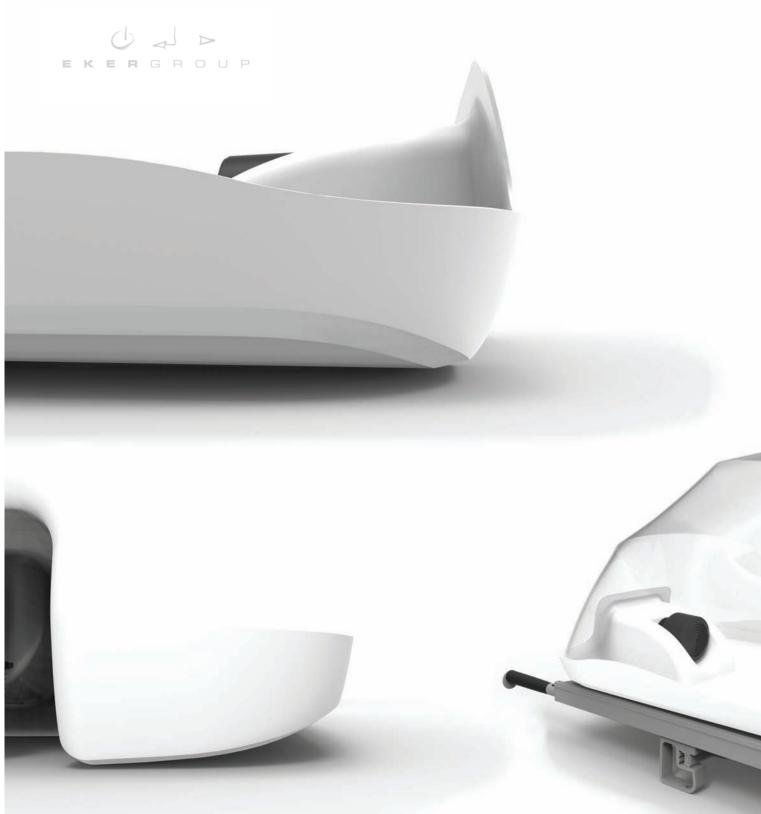
"

This is a medical device designed for transportation of patients in the field to the nearest treatment center. Isolation of patients with contagious diseases, in conjunction with and during transportation of patients, in order to avoid the spread of the disease to the general environment. The device provides full protection against air-borne, droplet and contact transmission of pathogens.

The master thesis is based on a collaboration with Eker Design, and developed in their headquarters at Torsnes, Fredrikstad. Details of the end result is protected

Saving one - protecting everyone









Anders Aannestad

+47 942 64 308 a.aannestad@gmail.com G @aannestads

TITTE - an exploring torch developed for Blafre

This project has explored how highlighting a company's history and values can create guidelines for their further product development. The focus has been on creating an increased connection between user and product by designing the functions and a shape that encourages activity, tactility and create adventures through use.

The project is done in collaboration with Blafre and has resulted in TITTE – an exploring torch that will become a part of their product range. The torch is a result of a close dialog with the company and a process of history telling through products, based on the company and their universe.

Take TITTE out for treasure hunting, let it light up your tent or be your companion alongside the bed at night. TITTE encourages activation and discovery through use with its playful design. TITTE works both as a handheld torch and a table lamp - lying or standing upraised.

The lamp automatically turns itself off after 30 minutes. This way you don't have to worry about the batteries running out even after the children have gone to sleep. The opaque top cover can easily be replaced with an included galaxy filter. The LED light will then project a soothing galaxy on the ceiling. Children can even get creative and make their own unique stencils of one of the included templates and create exciting shadows on the wall or the ceiling.

Take TITTE out for treasure hunting, let it light up your tent or be your companion alongside the bed at night





MA

Emilie Stahl Carlsen

+47 913 91 314 emiliestahlcarlsen@gmail.com www.emiliestahlcarlsen.com



Design for social integration

Many people today are experiencing loneliness. People with low income, mired by today's strict economy, are especially at risk. In addition to this, Norwegian culture could also be considered a contributing factor. In Norway, it is difficult to forge new bonds outside of the social circle you've grown up or worked in. So what about people working from home, people that have recently moved, newcomers that have yet to grasp how things work, and refugees and asylum seekers?

One possibility is meeting people over common activities or events. Unfortunately for many, these might be too costly or are communicated about mainly in Norwegian.

These issues were explored through collaboration with local community members in Ås; The driving forces and enthusiasts behind local social activities, and employees and residents at Bjørnebekk reception center. This resulted in the design of a new social platform: Sosial Spaghetti.

Sosial Spaghetti is an online social platform with it's own visual language that lets you meet like minded people by finding or starting activities based on your hobbies and interests. The site also helps with poster templates and tips on where and how to get support or donations, but most importantly it connects people by avoiding the use of text. It embraces the fact that only 7 % of human communication is words, and trusts that when people don't share a common language, but share a common interest or activity, they will work it out. The visual language is a set of translated standard icons along with photos for further explanation. When text is needed, users may use keywords and short sentences, that are then translated. This makes Spaghetti easy to read and available for all.

'Men often hate each other because they fear each other; they fear each other because they don't know each other; they don't know each other because they can not communicate; they can not communicate because they are separated '

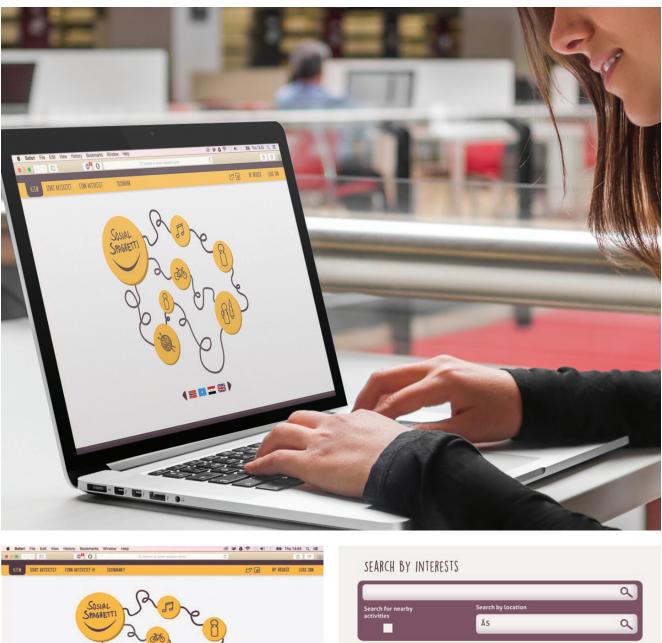
- Martin Luther King jr.



All misconceptions disappear when people meet - that I can assure you!

MA

- Eva Kind, Bjørnebekk reception center









Sandra Elvebakken Myrland +47 930 80 191

sandra.e.myrland@gmail.com sandrascuriosity.tumblr.com





Designing for increased supporter affiliation

This project is about how design of supporter gear can build a community and inspire more people to become active supporters of Lørenskog Ishockeyklubb (LIK).

Through a user oriented process with interviews with fans and club leaders along with observation at hockey matches, a concept with reflective materials was developed and tested through design of t-shirts and sweaters.

The reflective material will light up right before game starts: The main lights are off and the strobe light glides over the excited crowd. Supporters clothing and fan gear will light up with the club's logo as the light hits the motif. People watching from home and people on the other side of the stadium will see something that looks like a sea of lighters at music concerts, and the players sees how many people are there to support them.

Reflectives are fun to photograph with blitz and could be used with various fun hashtags like #LIKrefleks, which invites for sharing on social media - both spreading the word that the games are on and showcasing supporters.

The reflective details gives people additional reasons for buying and using the fan gear in everyday settings: it's an easy way to be safe riding their bike or walking the dog late in the evening. This way people can connect outside games and strengthen their feeling of affiliation and community. In the long run, seeing more people wearing fan gear on an everyday basis might also inspire people to join the community and become active fans. Engaged fans have positive effect on players, and can motivate them to perform better







Tommy Alexander Johansson

+47 408 90 854 tmy.joha@gmail.com IG @therealtopz



Critical Design for engagement, discussion and innovation

This research focuses on Critical Design and the use of a critical artefact method to create discussion about design for public space. The project sets out to develop a design approach and a critical design method for making conceptual design proposals and objects that encourage meaningful reflection on design and public space. The intention of the conducted research is the expansion of a Critical Design approach from galleries and into the public realm and industrial contexts.

In collaboration with local industry Mapei AS and two educational institutions the study was conducted through a series of relevant projects. Mapei AS has been a leading Norwegian supplier of adhesives, sealants and other chemical products for the construction industry since 1976. The research consists of a series of case studies and participatory design workshops that involved testing the critical design approach by working in a cross-disciplinary team consisting of product designers, tertiary-level product design students, chemical engineers and relevant stakeholders. The research consists of a theoretical framework found in the broader field of Critical Design, critical theory and innovation.

The Critical Design proposals 'Soft Concrete Chairs' and the 'Changing Concrete Surfaces' explore the potential and possibilities for Mapei AS' products other than the usage in the construction industry. These proposals were not to be a set of practical objects, but are meant to open up for dialogue amongst collaborators regarding the value that these designs might embody. Imbuing concrete surfaces with new meaning adds value to the product. A pattern reveals itself on the flooring when it comes in contact with rain, imparting the concrete with another meaning and an enriched experience. Critical Design focuses on the world as it could be, imagining and realising possible futures"







Sunniva Münster +47 941 05 310 sunniva.munster@gmail.com IG @sunniva.m



Creating a lasting bond between blood donors and blood banks

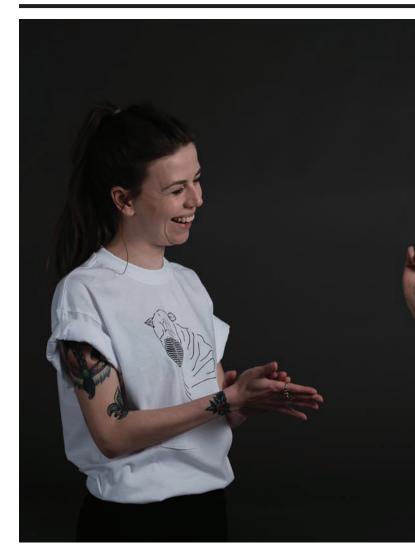
Hospitals today are in need of more blood than is currently donated to the blood banks. Because of this Norwegian blood banks are dependent on their donors giving more often than in other countries.

The need for blood will continue to increase as a larger share of our population gets older and the birth rate goes down. The Red Cross are working systematically to enlist new blood donors, but there is little focus on keeping and motivating already existing donors. Research for this thesis has uncovered barriers that might lead to decreased motivation and play a role in why some start donating less or stop altogether. One reason is that the blood banks across the country cooperate poorly, complicating the transition to one blood bank to another when moving cities. Furthermore strict rules for guarantines and big life changes like moving or starting a family also play a role in people's motivation. The focus area of this thesis has therefore been motivating existing donors to continue using the blood bank.

The final concept is based on the blood bank's developing a close relationship with its donors. The idea is that the blood banks will maintain and increase the motivation of the donors through sending out an email and a package by mail, making the user conscious about how much blood they have given between donations. Every time the user has donated a certain amount of blood they will receive a t-shirt in the mail with an animal. The size of the animal represents the amount and times the user has donated blood, and the motivational email challenges the donor to reach for the next animal on the list. By doing this the user is rewarded for their contribution, and at the same time given a challenge that will motivate them to reach the next goal. As a result the user will associate giving blood with something that is positive and fun.

No donor can, of course, be said to be characterized by complete, disinterested, spontaneous altruism

- Richard M. Titmuss







Marte Synnøve Rømo +47 481 92 021 marte.synnove.romo@gmail.com



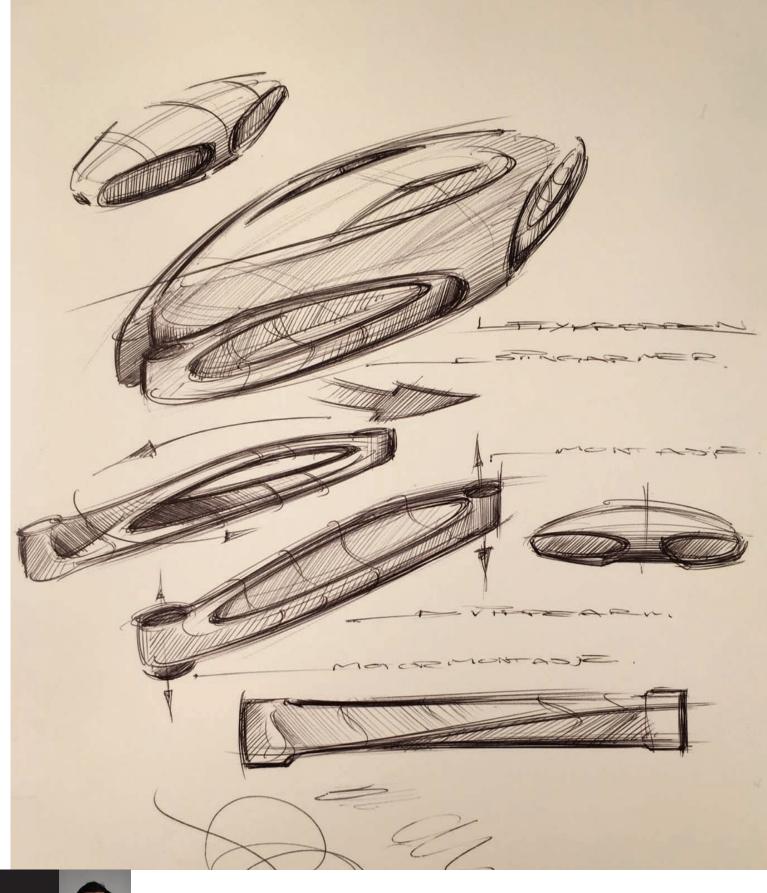


Search and rescue drone (SAR)

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Anna is a rescue drone, which can autonomously search and find people in need, and quickly notify the rescuers where the victim resides.

Anna can with its advanced design withstand most weather and can fly long distances in search of those who need to be found, whether on land, in the mountains or at sea. Anna is designed to be used by personel without training and are designed so that anyone can perform maintenance or repairs. Anna will not replace human capacity, but act as a supplementary tool, to find people in need faster and safer





Nima Shahinian +47 944 28 003 nima@hoos.no

vww.hoos.no

Development of design strategy and urban bikewear

Cycling as a form of transport is on the rise, and the market for bicycles, clothes and equipment is growing. Bike cafés have popped up on every street corner and bike share systems gain new users every day. The bicycle market is shifting more and more towards non-competitive and urban user groups.

Birk is a Norwegian bike brand, that since its start in the late nineties has focused on providing affordable high quality bike products, both clothing and other equipment, to competitive cyclists and recreational athletes. With the new trends and the shift in this market, Birk needs to react.

The project's goal was to identify and refine Birk's core values so that they could be used as a foundation for product development for new segments within the growing bicycle market. The result is a new brand strategy and the first prototypes of a new series of Birk products. The project uses theories from branding and product design to create better products for both Birk and the users.

The project was a collaboration with Birk Sport AS.

As the bicycle market is shifting more and more towards non-competitive and urban user groups, Birk needs to react





Håkon Stuler +47 476 20 208 hstuler@gmail.com

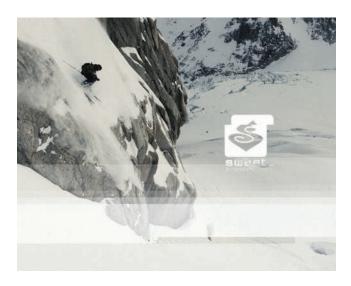
Protection from the surroundings in avalanche terrain

Today steep terrain is more accessible than ever as a result of new products on the market. This means that ski and snowboarders expose themselves to potential avalanches more often. The complexity of snow layers, terrain traps, human behaviour and weather demands more than just the right equipment but also a lot of training, knowledge and experience.

Scalpel backpack is developed in close collaboration with Sweet Protection. It combines comfort, functionality and safety together in one solid daypack. Avalanche experts, guides and freeriders have been involved in the development process.

Scalpel Backpack presents a dedicated compartment for easy access to avalanche gear. It also contains a multifunctional seating pad with graphics about evaluation and rescue in avalanche terrain. In addition to greater comfort when resting, the seating pad gives you an important reminder of tour planning, evaluation and group dynamics. It can also be used as a tool in avalanche rescue, to be able to think clearly in a crisis situation.

The Scalpel Backpack is designed to last for a lifetime in the roughest conditions. Daisy chains offers multifunctional use and carrying options. It has a narrow fit that gives you great freedom of movement and therefore the best ski experience. The capacity of 25 L. combined with access from the back and the side panel provide plenty of ways to organize and access your necessities for a daytrip.



It can be difficult to get an overview of the situation and remember what to do without being paralyzed. Every second counts







Marte Søderlund +47 452 88 865 marte.soderlund@gmail.com IG @martesoderlund



Bachelor students





Viktoria Brønlund

Andrea Bue



Olga Gåsland

Thea C. Jager

Anniken Sunde Frich



Anders Fossheim

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Ida Malene Jacobsen



Lars Kvinnesland

94 graduate 2016



Andrea E. Lindberg

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Siri Line



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Filip Cassergren

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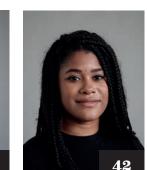
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Erik Harmens



Tobias B. Johannessen



Maria Løland





Thomas Ertzgaard



Kristian Hynne



Daniel Kvebæk



Malin B. Medin







Guro S. Midtun



Jone Myking

Anna Richardson

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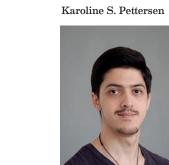
Sunniva P. Sandnes

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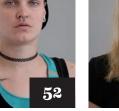
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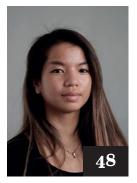
Serat Turan











Hamy Nguyen



Elias D. Olsen



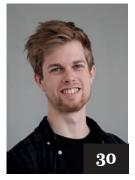
Anne Marthe Strand



Izelin Tujunen



Elin Våg



Fredrik Våland

Master students

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Anders Aannestad



Emilie Stahl Carlsen Kristin Hvalbye



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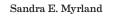


2016

Sunniva Münster



Marte Søderlund



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Marte Synnøve Rømo

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Nima Shahinian

Håkon Stuler

Colophon

Oslo and Akershus University College of Applied Sciences

Department of Product Design

+47 67 23 50 00 postmottak@hioa.no

Coordination by Anniken Maana

Photots by **Vegard Hartmann**

Design / Art Direction Emilie Stahl Carlsen Fredrik Våland Hamy Nguyen Lars Kvinnesland

