

New MSCA research projects at the Coloumlab

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Professor

Coloumlab
Department of Computer Science
NTNU, Gjøvik, Norway





MSCA **DOCTORAL** **NETWORKS**

- Doctoral Networks fund international, interdisciplinary and inter-sectoral doctoral training programmes.
- They support consortia of academic and non-academic organisations to recruit and train doctoral candidates, enhance their research and transferable skills, and improve career prospects across sectors.
- The action includes standard, industrial and joint doctorates and promotes researcher mobility, innovation and collaboration across borders.
- Typically 15 fully funded Doctoral Candidates
- Individual PhD topics working towards a common goal
- More focus on researcher training than the actual research



EUROPEAN
COMMISSION

HORIZON 2020



Excellent Science (24.4 B €)

European Research
Council
(13.1 B €)

Future and Emerging
Technologies
(2.7 B €)

Marie Skłodowska-Curie
Actions
(6.1 B €)

Research Infrastructures
(2.5 B €)

Industrial Leadership (17 B €)

LEIT = Leadership in
enabling and industrial
technologies

- ICT
- Nano, new materials
- Biotechnology
- Space

(13.5 B €)

Access to Risk Finance
(2.9 B €)

Innovation in SMEs
(0.6 B €)

Societal Challenges (29.7 B €)

Health
(7.5 B €)

Food
(3.9 B €)

Energy
(6 B €)

Transport
(6.3 B €)

Climate
(3 B €)

Inclusive Societies
(1.3 B €)

Security
(1.7 B €)

Spreading Excellence (0.8 B €)

Science for Society (0.5 B €)

EIT (2.7 B €)

JRC (1.9 B €)

Euratom (1.6 B €)

Jon Yngve & Marie: The Love Story





Colour Printing 7.0: Next Generation Multi-Channel Printing

- 4 year training and research project (2011-2015)
 - ITN - Initial Training Network, EU FP7, Marie Curie Actions
 - Network of European universities, research institutes, and companies
 - Coordinated by Gjøvik University College, Prof. J. Y. Hardeberg
 - <http://www.cp70.org>
- Funding of
 - 7 PhD students and 2 postdocs
 - Research and training activities
 - Appx 2.16 MEUR, 17 MNOK from the EU
- A breakthrough for the Coloumlab (and GUC/HiG)
 - «Høgskoleforskning i verdensklasse» (Forskerforum 10.4.12)
 - «Ikke hverdagskost» (OA, 11.12.12)
- Core research topic: Spectral printing





- **Teun Baar**
 - PhD thesis entitled “Optimization of print quality with multi-channel printing,” Télécom ParisTech, 2015
- **Sepideh Samadzadegan**
 - PhD thesis entitled “Printing Beyond Color: spectral and specular reproduction,” TUD, 2015
- **Radovan Slavuj**
 - PhD thesis entitled “Modeling and halftoning for multi-channel printers; a spectral approach,” GUC(NTNU), 2015
- **Melissa Olen**
 - PhD thesis entitled “The Development of Multi-Channel Printing Methodologies for Fine Art Applications,” UWE, 2016
- **Paula Zitinski Elias**
 - PhD thesis entitled “Improving image quality in multi-channel printing - multilevel halftoning, color separation and graininess characterization,” LU 2017
- **G M Atiqur Rahaman**
 - PhD thesis entitled “Use of Reflectance measurements to study turbid media by imaging,” UEF 2017
- **Srikrishna Nudurumati**
 - Research on observer variability in appearance matching for spectral colour management
- **Ludovic Coppel**
 - Research on paper optics, print modeling, spectral proofing, fluorescence
- **Steven Le Moan**
 - Research on spectral image quality
- **Jana Blahova**
 - Research on spectral color printing reproduction
- **Irina Ciortan**
 - Research on spectral reproduction of paintings

2018 Colourlab Grand Slam

- Two **coordinated** projects in the Horizon 2020 **Marie Skłodowska-Curie Innovative Training Network (ITN)** call
 - CHANGE and ApPEARS
- Among the **toughest** programmes in Horizon 2020 (~5% success rate)
 - Only 2 coordinated projects to Norway this year
 - They both went to **NTNU – Gjøvik – IDI – Colourlab – ...**
- Ca **80 MNOK** total budget
 - 2 x 15 PhD positions
 - 8 PhD students hired @ NTNU
 - And a Project Manager





ApPEARS

APPEARANCE PRINTING

European Advanced Research School

<http://www.appears-itn.eu>





The ApPEARS Project

- ApPEARS: Appearance Printing – European Advanced Research School
- Material appearance in 2.5D and 3D printing
- EU Funded *Marie Skłodowska-Curie Action – Innovative Training Network (ITN)*
 - 4 years: April 1, 2019 – March 31, 2023 (extended to November 30, 2023)
 - 4.3 MEUR funding
- Co-ordinated by NTNU
 - IDI, Colourelab, Gjøvik
 - Scientific co-ordinator: Jon Y. Hardeberg (jon.hardeberg@ntnu.no)
 - Deputy co-ordinator: Aditya S. Sole (aditya.sole@ntnu.no)
 - Project manager: Anneli T. Østlien (anneli.ostlien@ntnu.no)
 - Financial Officer: Anne Hilde R. Nymoen
- 14 Partner institutions throughout Europe
- 15 (16) PhD students/Early Stage Researchers
- Interdisciplinary approach (Physics, Material/Optical Sciences, Computer Graphics, Theoretical modelling, Printing technology, ...)
- <http://www.appears-itn.eu>



ApPEARS
APPEARANCE PRINTING
European Advanced Research School



CULTURAL HERITAGE ANALYSIS
FOR NEW GENERATIONS

<http://www.change-itn.eu>



Before and after cleaning of a daguerreotype, Source: Picquery.com



Before and after cleaning of an altarpiece, courtesy of University of Oslo.

The CHANGE Project

- CHANGE: Cultural Heritage Analysis for New Generations
- Imaging science and technology (e.g. 3D and spectral) for cultural heritage
- EU Funded *Marie Skłodowska-Curie Action – Innovative Training Network (ITN)*
 - 4 years: May 2019 – April 2023
 - 4 MEUR funding
- Co-ordinated by NTNU
 - Colourlab, Department of Computer Science, Gjøvik
 - Co-ordinator: Jon Yngve Hardeberg
 - Deputy co-ordinator: Sony George
 - Project manager: Anneli T. Østlien
 - Financial Officer: Anne Hilde R. Nymoen
- Interdisciplinary approach
 - Conservation science
 - Imaging science
 - Visual computing
- 18 partner institutions throughout Europe
- 15(14) PhD students/Early Stage Researchers
- <https://www.change-itn.eu>



This project has received funding from the European Union's H2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement 813789

Also **partner** in DN/ITN projects

- HiPerNav - High Performance Soft-tissue Navigation
 - 2016-2021
 - <https://cordis.europa.eu/project/id/722068/reporting>
- UNVEIL - Unified Nondestructive Evaluation of Historical Artifacts
 - 2026-2030
 - <https://unveil-dn.eu/>
- GLASS-CARE - Green Light for Advanced Solutions in Stained Glass Conservation and Application of Research and Education
 - 2027-2031
 - <https://cordis.europa.eu/project/id/101311557>



[Hjem](#) > [Historisk EU-tildeling til Colourlab ved NTNU i Gjøvik](#)

Historisk EU-tildeling til Colourlab ved NTNU i Gjøvik



Konkurransen var knallhard da EU fordelte midler til forskerutdanning og internasjonalt samarbeid. Colourlab ved NTNU i Gjøvik fikk seks nye prosjekter, et resultat som beskrives som historisk. Prosjektene vil forvalte nærmere 200 millioner kroner.



Gjengen fra Colourlab som har blitt tildelt rundt seks EU-prosjekter

NTNU-lab med storeslem i Horisont Europa

Fire prosjekter ledet fra Norge har fått midler til forskerutdanning gjennom Horisont Europa. Tre av dem ledes fra en lab på Gjøvik.



NTNU-professor Jon Yngve Hardeberg er henholdsvis leder, nestleder og veileder i tre av de fire Marie Skłodowska-Curie Actions-prosjektene i Horisont Europa som ledes fra Norge. Foto: Karen Stampen/NTNU



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— Det er noen som er bekymret for om vi har plass til alle de nye stipendiatene, men jeg tror nok det går bra. Disse tildelingene betyr mye for at vi skal kunne fortsette med forskningen vi driver med, sier Jon Yngve Hardeberg, professor ved NTNU.

Universitetet har nemlig gjort en form for storeslem i siste utdeling av midler gjennom Marie Skłodowska-Curie Actions-programmet i Horisont Europa.

Helse

NTNU-satsinger får 200 millioner kroner – nå blir det ansettelses



LEDER: Marius Pedersen leder forskningsgruppen som får 200 millioner til seks forskningsprosjekter. Foto: Tobias Brøste Båkind

Av [Tobias Brøste Båkind](#)

Oppdatert: 20.04.26 09:12
Publisert: 13.04.26 10:10

Kopier

Et pillekamera som skal oppdage kreft tidligere er blant prosjektene som får penger.

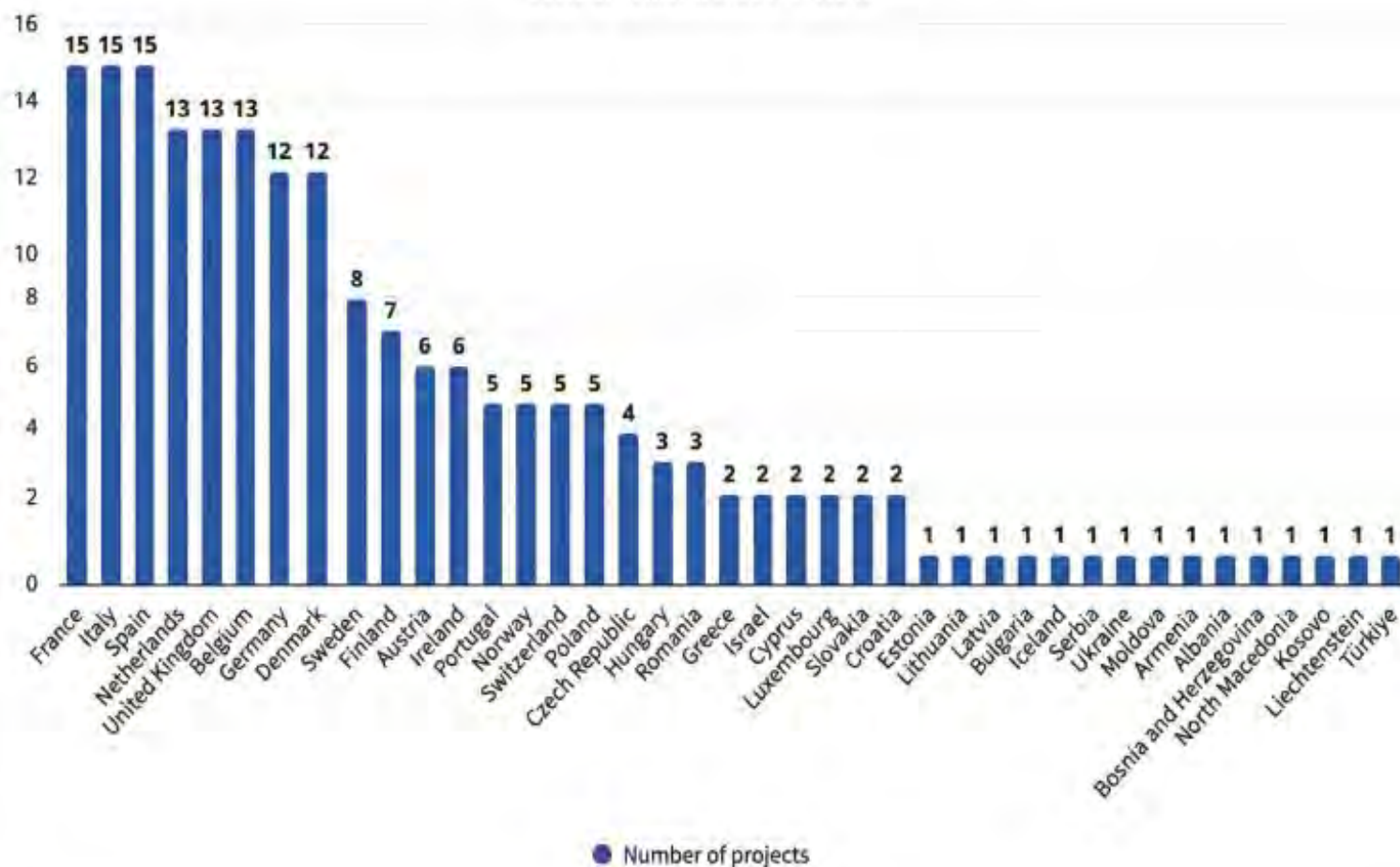
For abonnenter

Siden Marius Pedersen (42) startet å studere på Gjøvik på starten av 2000-tallet, har han ikke sett seg tilbake.

Nå er han professor i fargebildeteknologi og med i en av de fremste forskningsgruppene innen feltet i verden – Colourlab.

Projects by country of coordinator

Doctoral Networks 2025 call results

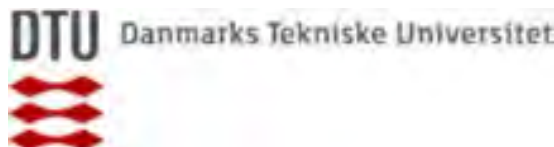
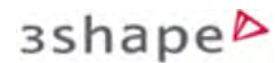


This comprehensive bar chart displays the count of coordinating organisations and their **associated projects** for the Doctoral Networks 2025 call, covering all 44 eligible European and **associated countries in this cycle**. This ensures every **participating nation is represented** in the analysis. The **top 5 countries**, as shown, are **France and Italy with 15 projects each**, followed by **Spain with 14**, and the **Netherlands and the United Kingdom with 13 each**. The data now includes a complete **breakdown of project activity** across all represented regions, from high-coordination hubs to single-project participants.

The WILD-MAIDN Project



- Why does It Look Different – Material Appearance International Doctoral Network
- MSCA Doctoral Network (DN)
 - 4.79 MEUR to fund 15 PhD students!
 - Project start: Feb 2027, PhD start: Sep 2027
- Co-ordinated by NTNU
 - Scientific co-ordinator: Jon Y. Hardeberg (jon.hardeberg@ntnu.no)
 - Deputy co-ordinator: Aditya S. Sole (aditya.sole@ntnu.no)
 - Project manager: Anneli T. Østlien (anneli.ostlien@ntnu.no)
- 15 Partner institutions throughout Europe



UNIVERSITY OF LEEDS



The PhD topics

- DC1: “Development of a Traceable **Multi-Scale** bidirectional spectrophotometry”; Gaël Obein (CNAM, France)
- DC2: “Optical and Visual Measurement of **satin** and **mattness**”; Gaël Obein (CNAM)
- DC3: “Appearance **Measurement** Parameter Identification”; Aditya Sole (**NTNU**, Norway)
- DC4: “Develop **3D** imaging system for appearance acquisition”; Kaida Xiao (Univ. Leeds, UK)
- DC5: “**Visual Mechanisms** of Appearance Equivalence”; Roland Fleming (Justus-Liebig University, Giessen, Germany)
- DC6: “**Material Constancy** through Appearance”; Jon Y. Hardeberg (**NTNU**)
- DC7: “Spectral Appearance rendering with **Motion**”; Jon Y. Hardeberg (**NTNU**)
- DC8: “Predictive Appearance Rendering of **Digital Twins** in Measured Viewing Environments”; Jonas Unger (Linköping University, Sweden)
- DC9: “Rendering and Analysing the Macroscopic Appearance of **Biostructures**”; Jeppe R. Frisvad (DTU, Denmark)
- DC10: “Voxel-based spectral volume rendering for **3D softproofing**”; Philipp Urban (Fraunhofer IGD, Germany)
- DC11: “**Meta** Appearance Difference Modelling”; Jon Y. Hardeberg (**NTNU**)
- DC12: “Appearance **Equivalence** framework and methodology”; Philipp Urban (Fraunhofer)
- DC13: “Appearance **Equivalence Metrics**”; Roland Fleming (Justus-Liebig University)
- DC14: “Designing Appearance **Difference Metrics**”; Kaida Xiao (Univ. Leeds)
- DC15: “Evaluating Appearance **Difference Metrics**”; Rafael Huertas Roa (University of Granada, Spain)



UNderstanding change in Cultural Heritage: the Next Generation of Experts

Marie Skłodowska-Curie Actions (MSCA)
Innovative Training Networks (ETN) – European Doctoral Networks
HORIZON-TMA-MSCA-DN 2025
2027-2031

www.unchange-dn.eu



This project has received funding from the European Union's H2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement 101312604

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CAPTURE

Improved Diagnosis, Monitoring and Treatment
through European Doctoral Collaboration
in Capsule Endoscopy

[Find our vacant PhD positions here](#)



8 countries



10 beneficiaries



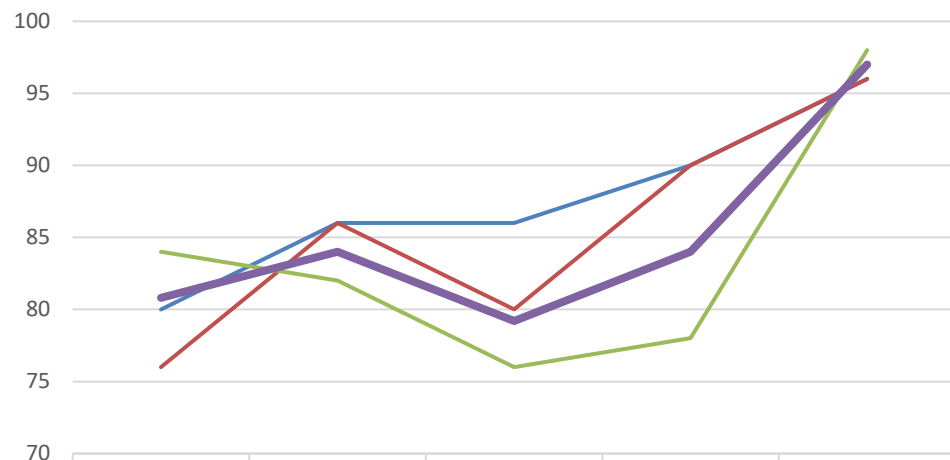
5 partners



15 doctoral candidates

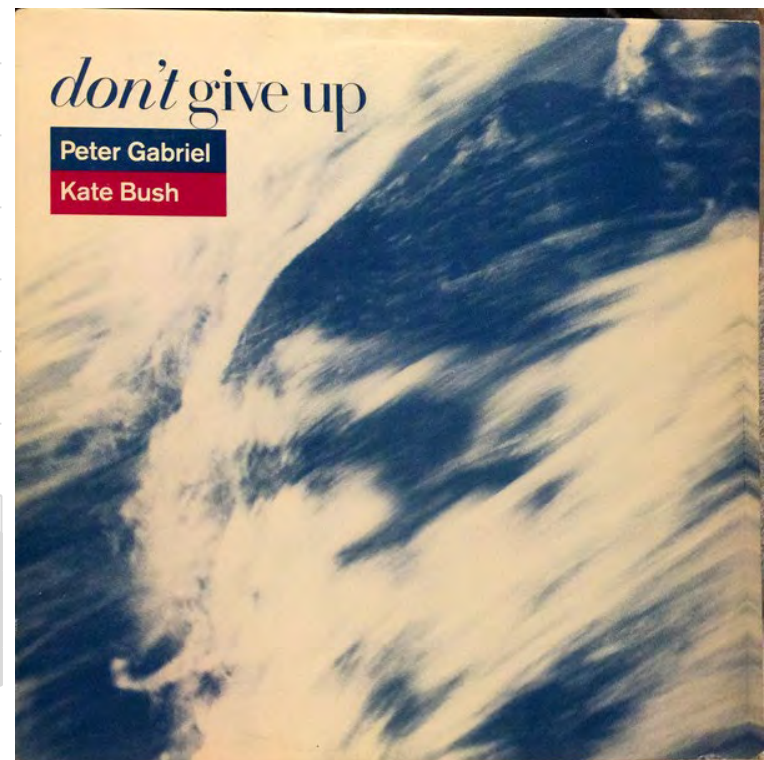


ApPEARS Proposal Evaluation Scores



	2014	2015	2016	2017	2018
Implementation	80	86	86	90	96
Impact	76	86	80	90	96
Excellence	84	82	76	78	98
Total	80.8	84	79.2	84	97

Implementation Impact Excellence Total



Wrap-up

- MSCA Doctoral Networks (ITN/DN) at the Colourlab
 - CP7.0 (2011-2015) <https://cp70.org/>
 - HiPerNav (2016-2021) <https://cordis.europa.eu/project/id/722068/>
 - ApPEARS (2019-2023) <https://www.appears-itn.eu>
 - CHANGE (2019-2023) <https://www.change-itn.eu>
 - UNVEIL (2026-2030) <https://unveil-dn.eu/>
 - UNCHANGE (2027-2031) <https://www.unchange-dn.eu/>
 - GLASS-CARE (2027-2031) <https://cordis.europa.eu/project/id/101311557>
 - WILD-MAIDN (2027-2031) <https://www.wild-maidn-dn.eu/>
 - CAPTURE (2027-2031) <https://www.capture-dn.eu/>
- Huge impact for Colourlab (and beyond)
- Questions – email me at jon.hardeberg@ntnu.no



CAPTURE

Improved Diagnosis, Monitoring and Treatment through European Doctoral Collaboration in Capsule Endoscopy

Funded by EU through the Horizon Europe programme MSCA, GANo. 101311908



CAPTURE

MSCA DOCTORAL NETWORK



15
POSITIONS



10
PARTNERS



EUROPE
WIDE



CLINICAL

- DC1** Endoscopy variability
- DC2** IBD Diagnosis
- DC3** Biomarkers & AI
- DC4** Polyp matching



IMAGING

- DC5** High-resolution imaging
- DC6** Multispectral WCE
- DC7** Energy-efficient image coding
- DC8** Image enhancement



VISUALIZATION

- DC9** Capsule localization
- DC10** 3D reconstruction
- DC11** Interactive visualization
- DC12** Video summarization



AI

- DC13** On-capsule AI
- DC14** Explainable AI
- DC15** NLP for WCE





Towards earlier and more accurate diagnosis

- Gastrointestinal disorders are becoming increasingly common in Europe, and cases are expected to rise as the population ages.
- Today, many conditions are diagnosed using traditional endoscopy, which is time-consuming, costly, and uncomfortable.
- A less invasive alternative is a swallowable camera capsule, but it produces long videos with limited image quality, making diagnosis challenging and time-consuming.
- The CAPTURE project aims to develop improved technology to enhance image quality, speed up analysis, and improve diagnostic accuracy, enabling earlier detection and treatment of disease.



Beneficiaries

the Norwegian university
of science and technology



Innlandet hospital trust



University of southern Denmark



Robert Gordon university



Sheffield teaching hospital



Technical university of Darmstadt



University of Milano-Bicocca



Institute of systems
and robotics



University of Granada



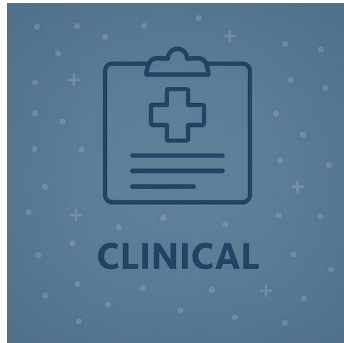
University of Thessaly

Associated partners:

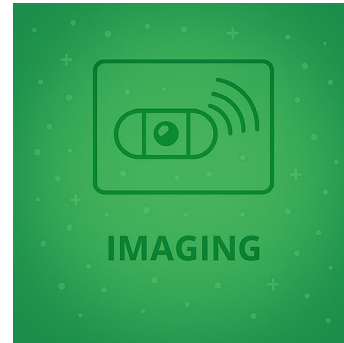
- *Spektralion AS*
- *Stratos AI*
- *Region Syd-danmark*
- *University of Leeds*
- *Universidade de Coimbra*



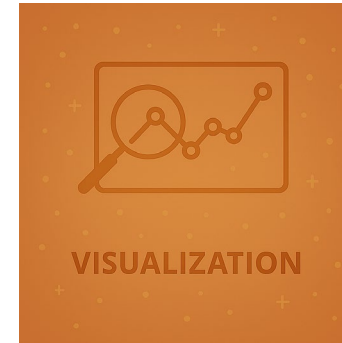
Scientific work packages



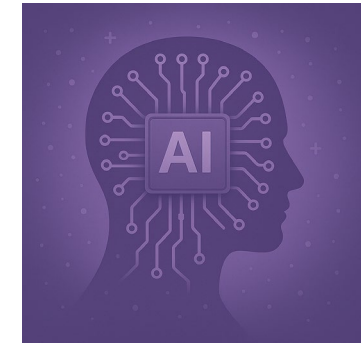
- Clinical focuses on enhancing diagnostic accuracy and consistency in wireless capsule endoscopy.
- DC1 Endoscopy variability
- DC2 IBD Diagnosis
- DC3 Biomarkers & AI



- Imaging focuses on advancing the technological capabilities of wireless capsule endoscopy to improve diagnostic accuracy and efficiency.
- DC5 High-resolution imaging
- DC6 Multispectral WCE
- DC7 Energy-efficient image coding
- DC8 Image enhancement



- Visualization encompass a range of innovative projects aimed at advancing wireless capsule endoscopy through improved localization, visualization, and clinical usability.
- DC4 Polyp matching
- DC9 Capsule localization
- DC10 3Dreconstruction
- DC11 Interactive visualization
- DC12 Video summarization



- AI focus on enhancing the intelligence, efficiency, and interpretability of wireless capsule endoscopy systems.
- DC13 On-capsule AI
- DC14 Explainable AI
- DC15 NLP for WCE





Training activities

- Training events:
 - Clinical Overview and Insights on WCE Needs and Demands
 - Image formation and processing
 - Statistical Methods and Applications
 - AI Fundamentals and Ethics
 - 3D Reconstruction Fundamentals in Medicine
- Workshops:
 - Clinical
 - Imaging
 - Visualization
 - AI





CLINICAL

- DC1** Endoscopy variability
- DC2** IBD Diagnosis
- DC3** Biomarkers & AI



IMAGING

- DC5** High-resolution imaging
- DC6** Multispectral WCE
- DC7** Energy-efficient image coding
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VISUALIZATION

- DC4** Polyp matching
- DC9** Capsule localization
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- DC11** Interactive visualization
- DC12** Video summarization



AI

- DC13** On-capsule AI
- DC14** Explainable AI
- DC15** NLP for WCE



RECRUITMENT STARTS SOON

Explore the project and apply online



capture-dn.eu

Follow us on LinkedIn for news and updates



CAPTURE

Funded by
the European Union



DETECT



UNDERSTAND



IMPROVE



Thanks!

For more information, contact:

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- **Financial officer**
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CAPTURE



This project is funded by EU through the Horizon
Europe programme MSCA, GANo. 101311908

www.capture-dn.eu

22/09/2026



UNderstanding change in Cultural Heritage: the Next Generation of Experts

Sony George
Colourlab,
Department of Computer Science
NTNU Gjøvik



Funded by the
European Union

www.unchange-dn.eu

UNCHANGE – An overview

- Innovative Training Networks (ETN) – European Doctoral Networks
- 9 beneficiaries, 9 partners
- 7 EU countries
- 15 PhD students
- Budget: €4,746,888.16
- Project period: 2027 – 2031 (48 months)
- Coordinator: Colourlab, NTNU Norway

UNCHANGE Consortium

Beneficiaries



Kunnskap for en bedre verden



Consiglio Nazionale
delle Ricerche



www.cnrs.fr



UNIVERSITÉ
BOURGOGNE
EUROPE



UNIVERZA
V LJUBLJANI

Hes·SO

Haute Ecole Spécialisée
de Suisse occidentale

Fachhochschule Westschweiz

University of Applied Sciences and Arts
Western Switzerland

SCHWEIZERISCHES NATIONALMUSEUM.
MUSÉE NATIONAL SUISSE. MUSEO
NAZIONALE SVIZZERO. MUSEUM
NAZIUNAL SVIZZER.



Partners



Academy
of Fine Arts
in Warsaw

PEGGY GUGGENHEIM
COLLECTION



Nasjonalbiblioteket



NARODNA IN
UNIVERZITETNA
KNJIŽNICA



Where did we start?



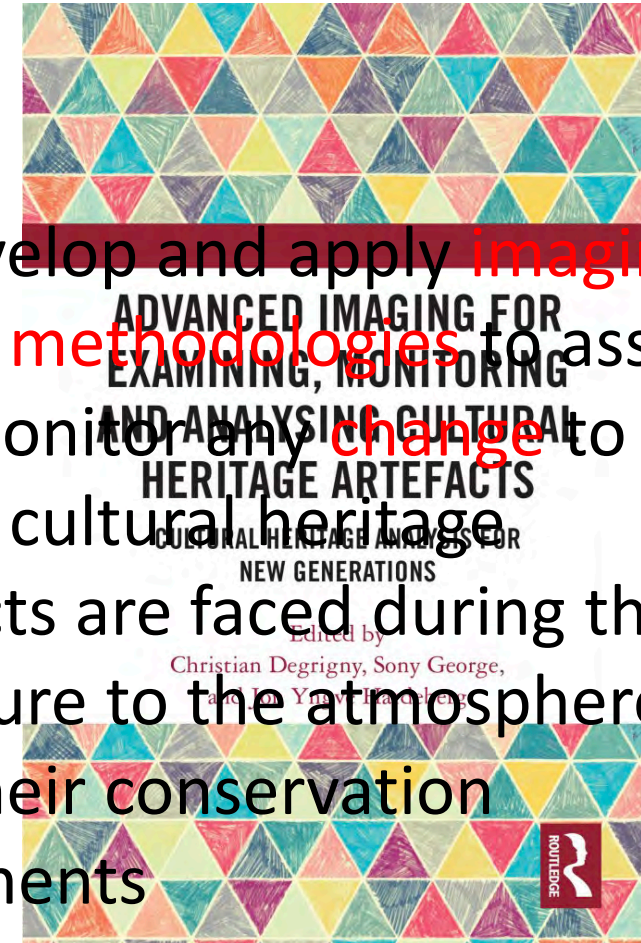
CULTURAL HERITAGE ANALYSIS
FOR NEW GENERATIONS

2019 – 2023



Before and after cleaning of an altarpiece, courtesy of University of Oslo.

To develop and apply **imaging based methodologies** to assess and monitor any **change** to which cultural heritage artifacts are faced during their exposure to the atmosphere and their **conservation treatments**



Agnese Babini



ESR1

Hyperspectral imaging of stained glass windows

Dipendra Mandal



ESR2

Quality Evaluation in CH Digitization

Evdokia Saiti



ESR3

Registration techniques for differential and multi-modal data

Saha Sunita



ESR4

Analysis and visualization of multi modal image data in CH surfaces monitoring

Athanasia Papanikolaou



ESR5

Portable multi modal device(s) for surface measurement/monitoring

Jizhen Cai



ESR6

Development of multi modal image data fusion methods for change monitoring

Yoko Arteaga



ESR7

Microscopic 3D imaging and conservation

David Lewis



ESR8

Capture and characterization of change in the appearance of CH objects surface

Ramamoorthy Luxman



ESR9

Appearance change assessment: Link between local geometry and global appearance descriptors

Jan Cutajar



ESR10

Imaging-based documentation and analysis for change monitoring of novel dry-cleaning restoration/conservation methods for unvarnished paintings

Silvia Russo



ESR11

Analysis and assessment of degradation of polychrome artworks

Alessandra Marrocchesi

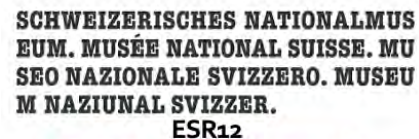


UNIVERSITEIT VAN AMSTERDAM

ESR13

Low-budget portable device for technical imaging of CH artifacts

Deepshikha Sharma



ESR12

Analysis and monitoring of degradation of ancient glasses



ESR14

Enrichment of 3D volumetric data with metadata and semantics

Amalia Siatou



ESR15

Use of imaging techniques to characterize and monitor the surface of historical oxidized, patinated and varnished metals

UNCHANGE Objectives

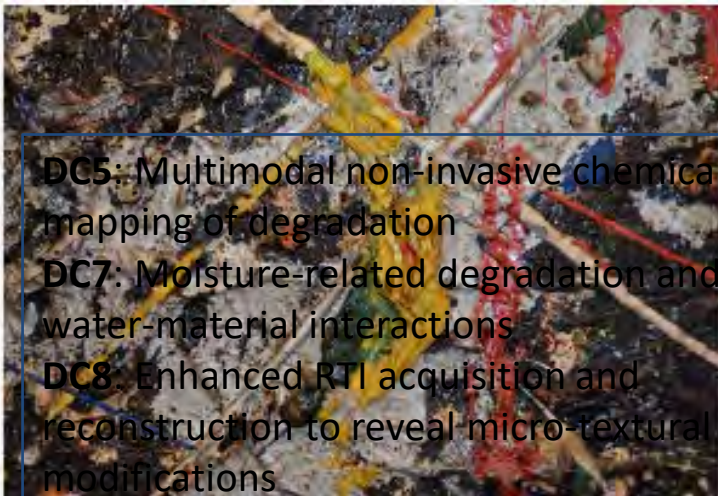
UNderstanding change in Cultural Heritage: the Next Generation of Experts

- Understand how cultural heritage materials deteriorate by linking physical and chemical causes to visible and invisible change.
- Develop non-invasive imaging, models and digital tools to predict change and create Heritage Digital Twins for better conservation decisions.
- Test methods with heritage partners to strengthen evidence-based, digitally enabled long-term preservation.
- Train interdisciplinary researchers spanning conservation science, materials science, imaging physics and AI.

Chemical Imaging Surface Changes Paper Sketches
Macro-scale Analysis Preventive Conservation Painted Heritage
Light-induced Change **Cultural Heritage** Felt-tip Markers
Composite Objects Spectroscopy
Optical Images
Chemical Degradation 3D Shape
Iron-gall Ink Wall Paintings
Generative Modeling Reconstruction
Molecular Water **Change Monitoring** Fading Mechanisms
Large-scale Acquisition Material Contact
Coloured Pencils Object Representations
Wooden Sculptures

UNCHANGE Case studies

“Alchemy”, (1947), J.
Pollock’s masterpiece
PGC, Italy



DC5: Multimodal non-invasive chemical mapping of degradation
DC7: Moisture-related degradation and water-material interactions
DC8: Enhanced RTI acquisition and reconstruction to reveal micro-textural modifications

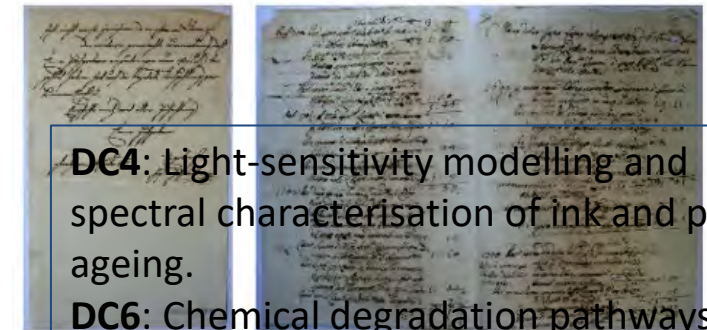
DC10: Multiscale 3D + chemical imaging of the surface and subsurface
DC13: Predictive modelling of change scenarios for polychromed artworks.
DC15: Investigations to characterise pigment degradation and reconstruct aspects of the original appearance

Crusifix (1250) from
Musvik church. Now
at NTNU Museum
(NTNU-M), Norway



DC1: Monitoring and visualisation of appearance change within a DT framework.
DC2: ML-friendly 3D object representations
DC3: Development of acquisition and correction strategies for HSI
DC8: Large-scale RTI stitching and super-resolution to capture fine microgeometry on carved surfaces.
DC9: Physics-based generative modeling of surface appearance
DC11: High-fidelity DT of medieval wooden sculptures.
DC14: Characterisation of the surface changes induced by contact of materials

Two manuscripts
at NUK, Slovenia
dated 1871 and
around 1700



DC4: Light-sensitivity modelling and spectral characterisation of ink and paper ageing.
DC6: Chemical degradation pathways of inks and dyes under fluctuating conditions.
DC7: Water-content mapping and moisture-cellulose interactions driving catalytic degradation.
DC12: Digital restoration of faded iron-gall inks based on VNIR/SWIR hyperspectral and chemical data
DC13: Predictive modelling of deterioration dynamics for integration in heritage digital-twin environments.

UNCHANGE Training

 TS Norway



 TS Italy



 TS France



 TS Switzerland

SCHWEIZERISCHES NATIONALMUSEUM. MUSÉE NATIONAL SUISSE. MUSEO NAZIONALE SVIZZERO. MUSEUM NAZIONAL SVIZZER.

 TS ERIHS-ERIC



Introductory
courses

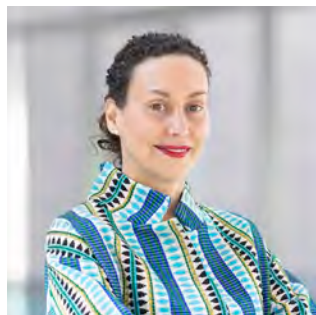
Indepth, hands-
on workshops

Transferable
skills

Advanced topics
in computational
and heritage
science

International Intersectoral Interdisciplinary Supervision and Secondments

UNCHANGE External Expert Advisory Board



Justyna Badach
National Gallery of
Art, Washington DC



Fenella G France
Library of Congress
Washington DC



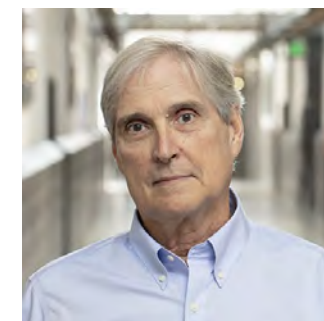
Marco Leona
The Metropolitan
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New York



Carla Schroer
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Rémi Petitcol
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UNCHANGE Coordination team



Sony George
Project coordinator



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Project manager



Chunhong Luo
Financial officer

Stay tuned.....

Next 4 years: 3DNs, 42 Doctoral students, 13M Euros



UNVEIL-Unified Nondestructive
Evaluation of hIstoricaL artifacts

2026 – 2030



UNderstanding change in Cultural
Heritage: the Next Generation of Experts

2027 – 2031



Green Light for Advanced Solutions in
Stained Glass Conservation and Application
of Research and Education

2027 – 2030

Thank you

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