

Annex to the Media Release, December 11, 2018

## List of Eccellenza projects

The Swiss National Science Foundation (SNSF) awards nine Eccellenza Professorial Fellowships and an Eccellenza Grant to outstanding young researchers who are conducting their projects at the University of Bern. You can find the short descriptions of the ten projects below.



### **Mary Flannery**

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**Project title: Canonicity, Obscenity, and the Making of Modern Chaucer (COMMode): An Investigation of the Transmission and Audiences of The Canterbury Tales from 1700 to 2020**

*Image: Juliette Vuille und Neil Rock*

The project examines contemporary responses to obscenity in editions of a key medieval text between 1700 and 2020 in order to understand tolerance and censorship in the modern era.



### **Nicolas Greber**

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**Project title: Tracing the emergence and evolution of Earth's continental crust with immobile elements and isotopes**

*Image: Courtesy of Nicolas Greber*

When did the first continental landmasses emerge, how did they develop over the course of Earth's history and how did this affect the evolution of life on our planet? The aim of the project is to find more precise answers to these questions.



**Alexander Heidt**

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**Project title: Advancing photonics for ultrafast science and technology**

*Image: Florian Adam*

In this project the state-of-the-art fiber optic technology will be used to generate laser light with extreme properties, which could provide new insights into the atomic world's ultra-fast processes and control novel computers that calculate 100,000 times faster than today.



**Martin Hoferichter**

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**Project title: Strong-Interaction Effects in the Search for Physics beyond the Standard Model**

*Image: Courtesy of Martin Hoferichter*

The Standard Model of particle physics successfully describes the known fundamental constituents of matter, but at the same time is incomplete and cannot explain, for example, dark matter or the matter-antimatter asymmetry in the universe. One strategy to discover physics beyond the Standard Model involves precision experiments at low energies. The objectives of the research project are improved calculations in the theory of strong interactions, which are necessary to identify deviations from the prediction of the Standard Model in various processes.



**Adrian Leemann**

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**Project title: Language Variation and Change in German-speaking Switzerland: 1950 vs. 2020**

*Image: Courtesy of Adrian Leemann*

The project investigates how Swiss-German dialects have changed over the past 70 years.



**Jan Bernhard Meister**

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**Project title: Rulers' Bodies in Late Antique and Early Medieval Monarchies**

*Image: Courtesy of Jan Bernhard Meister*

The project investigates how rulers' bodies were re-conceptualized, re-described and re-represented as incarnate embodiments of a monarchic world order in the course of the numerous political and religious upheavals between Roman Late Antiquity and the early Middle Ages.



**Charles Mullon**

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**Projekttitel: The Role of Eco-Evolutionary Dynamics and Genomic Evolution in Trait Variation**

*Image: Courtesy of Charles Mullon*

Using mathematical models, the project will study the ecological conditions that favour differences between individuals and the genetic interactions that underlie such differences.



**Mirko Schmidt**

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**Project title: School-based physical activity and children's cognitive functioning: The quest for theory-driven interventions**

*Image: Courtesy of Mirko Schmidt*

The project investigates how school-based physical activity should be designed to promote primary school children's cognitive functions.



**Benjamin Towbin**

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**Projekttitle: Design principles in the environmental control of growth and aging**

*Image: Courtesy of Benjamin Towbin*

The research project combines quantitative experiments and mathematical models to understand how and why the aging of organisms is influenced by their diet.



**Susanne Wampfler**

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**Projekttitle: Isotope astrochemistry: linking star formation with the solar system record**

*Image: Courtesy of Susanne Wampfler*

Using radio telescopes, this project will study the composition of the gas around young stars to understand why the terrestrial planets, comets, and asteroids are made of material differing from the Sun.