

Updated March 2024 For Spring 2024, Summer 2024, Fall 2024



Science and Health in Stockholm & Copenhagen DIS Study Abroad in Scandinavia



Overview

<u>DIS -Study Abroad in Scandinavia</u> offers science and health-related courses in Stockholm and Copenhagen during both the semester (spring and fall) and summer. The courses approach the academic content from a Scandinavian lens and are integrated with experiential learning concepts.

During the spring or fall, students enroll in one core course (with course-integrated study tours and three or four electives. Summer students can choose to take 3 to 9 credits over 3 to 9 weeks and can choose to stay in either Copenhagen or Stockholm, or mix-and-match locations.

Students at DIS, have ample opportunity to tap into medicine, public health, and health science theory and developments in Scandinavia and greater Europe through classes, Field Studies, and course-integrated Study Tours. Students considering work in the health sciences and medical fields will gain insight into career opportunities, alongside intercultural knowledge of different practices and policies between the U.S. and Europe, to help them be more effective as a future health professional.

Why Study in Scandinavia?

Healthcare systems are facing rising costs, aging populations, and inequity in health. Analyze and debate these challenges from a Scandinavian lens, while examining their interplay with the organization, financing, and priority-setting of the various systems encountered in class and on Study Tours.

Denmark and Sweden serve as unique case studies of the challenges and opportunities in current public health issues. DIS Copenhagen focuses on different countries' healthcare systems and how policy making, and prioritization affects quality and clinical outcomes. DIS Stockholm focuses on the relationship between international global health diplomacy and national policy making and the challenges that migrants face.

Stockholm and Copenhagen are home to dynamic environments rich in innovation, and traditions for knowledge sharing between companies, hospitals, universities, and public research institutions.

Semester Science and Health Core Courses

Biomedical Engineering in Scandinavia (Stockholm)

Prerequisites: Two courses in math, four courses in basic science (biology, chemistry, physics), and one engineering course, all at university level.

- Week-Long Study Tour: Denmark-Norway
- Core Course Week Sweden

Climate, Glaciers, and Human Impact (Copenhagen)

Prerequisites: One course in environmental or earth science at university level. One year of physics or chemistry at university level is recommended.

- Week-Long Study Tour: Iceland
- Core Course Week Study Tour: Denmark

Cognitive Neuroscience of Addiction (Stockholm)

Prerequisite(s): One course in neuroscience, physiological psychology, biological psychology, or cognitive psychology at university level.

- Week-Long Study Tour: London
- Core Course Week Study Tour: Sweden

Cognitive Neuroscience of Consciousness (Copenhagen)

Prerequisite(s): One course in neuroscience, physiological psychology, biological psychology, or cognitive psychology at university level.

Corequisite Course: Cognitive Neuroscience of Consciousness Lab

- Week-Long Study Tour: Florence
- Core Course Week Study Tour: Denmark

Cognitive Neuroscience of Creativity (Copenhagen)

Prerequisite(s): One course in neuroscience or psychology at university level.

- Week-Long Study Tour: United Kingdom
- Core Course Week Study Tour: Denmark

<u>Developmental Psychopathology (Stockholm)</u> –New Fall 2024

- Week-Long Study Tour: Madrid
- Core Course Week Study Tour: Sweden

Engineering Sustainable Environments in Scandinavia (Stockholm)

Prerequisites: Two courses in math, four courses in basic science (biology, chemistry, physics), and one engineering course, at university level.

- Week-Long Study Tour: Iceland
- Core Course Week Study Tour: Sweden

European Clinical Psychology (Copenhagen)

Prerequisite(s): One psychology course at the university level.

- Week-Long Study Tour: Vienna
- Core Course Week Study Tour: Denmark

Healthcare Systems: A Comparative Approach (Copenhagen)

- Week-Long Study Tour: Finland, Estonia (Helsinki, Tallinn)
- Core Course Week Study Tour: Denmark

<u>Human Health and Disease: A Clinical Approach</u> (Copenhagen)

Prerequisites: One year each of biology and chemistry at university level.

- Week-Long Study Tour: Helsinki-Tallinn or Krakow-Prague or Berlin-Poznan or Budapest-Vienna
- Core Course Week Study Tour: Denmark

<u>Ice Cores and Ice Ages</u> (Copenhagen)

Prerequisites: One course in environmental or earth science at university level. One year of physics or chemistry at university level is recommended.

- Week-Long Study Tour: Greenland
- Core Course Week Study Tour: Denmark

Medical Biotechnology and Drug Development (Copenhagen)

Prerequisites: One year each of biology and chemistry at university level.

- Week-Long Study Tour: Lisbon-Porto (Fall/Spring) or London (Spring) or Edinburgh (Fall)
- Core Course Week Study Tour: Denmark

Neuroscience of Emotion (Stockholm)

Prerequisite(s): One course in neuroscience, physiological psychology, or biological psychology at university level.

Coreguisite Course: Neuroscience of Emotion Lab

- Week-Long Study Tour: Paris
- Core Course Week Study Tour: Sweden

Polar Biology (Copenhagen)

Prerequisites: One course in environmental or earth science at university level. One course in biology or ecology at university level is recommended.

- Week-Long Study Tour: Arctic Norway
- Core Course Week Study Tour: Denmark

Precision Medicine: Tailored Treatment in Clinical Practice (Stockholm)

Prerequisites: One year of biology, including one course in either molecular biology or genetics, and one chemistry course, all at university level.

- Week-Long Study Tour: Dublin
- Core Course Week Study Tour: Sweden

<u>Psychopharmacology: Substances and the Brain (Copenhagen)</u>

Prerequisite(s): One year each of biology and chemistry at university level.

- Week-Long Study Tour: Frankfurt-Heidelberg or Munich
- Core Course Week Study Tour: Denmark or Southern Sweden

Public Health and Migration: Access, Politics, and Human Rights (Stockholm)

- Week-Long Study Tour: UK (London)
- Core Course Week Study Tour: Sweden

<u>The Loving Brain: Neuroscience of Relationships (Stockholm)</u> – New Course Fall 2024 Prerequisites: One course in neuroscience, physiological psychology, biological psychology, or cognitive psychology at university level. Week-Long Study Tour: Bosnia-CroatiaCore Course Week Study Tour: Sweden

Semester Science and Health Elective Courses

Stockholm

- Developing Brain: From Infancy to Adolescence
- Energy Cloud: Engineering Localized, Digitalized, Sustainable Networks
- Engineering Biomaterials
- Epidemiology: Swedish Case Studies
- Immunology and Infectious Diseases
- Medical Diagnostics
- Medical Ethics
- Medical Simulation Lab
- Neurodegenerative Diseases
- Neuroscience of Emotion Lab
- Psychology of Food: A Biopsychological Perspective
- Public Health Emergencies and Health-Crisis Management
- Public Health Policy in Practice
- Public Mental Health
- Statistics
- Tumor Biology and Oncology

Copenhagen

- Biological Conservation and Biodiversity (+ lab also available)
- Biology of Marine Mammals (+ lab also available)
- Cognitive Neuroscience of Consciousness Lab
- Cognitive Neuroscience of Sleep
- Complexity of Cancer
- Epigenetics and the Impact on Health and Disease
- Epidemiology: Danish Case Studies
- Ethical Brain: Philosophy and Neuroscience
- Ethical and Scientific Legacy of the Nazi Medical Crimes
- Genomics in Clinical Practice
- Gut Reaction: How Human Microbes Shape our Lives
- Health Beyond Borders
- Health Economics and Health Policy in Europe
- Health Promotion and Disease Prevention
- Healthcare Strategies for At-Risk Populations
- Immunology
- Impact of Epidemic Disease Upon European History
- Medical Ethics
- Medical Simulation Lab
- Narrative Medicine

- Neuroethics
- Neuroimaging of the Disordered Brain
- Neurological Disorders and Diseases
- Neuroplasticity
- Neuropsychology of Brain Injury
- Neurological Disorders and Diseases
- Neuroscience of Fear and Anxiety
- Neuroscience of Religion and Atheism
- Philosophy of Mental Health
- Pregnancy, Birth, and Infancy in Denmark
- Public Mental Health
- Social Brain: Neuropsychology of Social Behaviors
- Under the Influence: Alcohol, Drugs, and Young Adulthood

Labs & Undergraduate Research Abroad

Students can gain invaluable international lab experience while abroad or join a DIS faculty member's ongoing research project. DIS encourages students with a variety of academic backgrounds to apply for Lab or Research Assistantship courses.

Examples of past research assistantship projects:

- Breast Cancer and Mammography Efficacy
- HIV and Reproductive Technology Access
- Preventing and Treating Eating Disorders
- Mapping Protein Distribution in the Brain
- Perceptual Mechanisms of Appetite Regulation

Summer 2024 Stockholm/Copenhagen

Labs & Research Session (May 21 - July 5, 2024), 6 credits

Labs

- <u>Biomedical Lab</u> (Stockholm)
- Climate Change of Arctic Ecosystems Lab (Copenhagen)
- Microbrains Lab: Modeling Neurodegeneration (Copenhagen)

Research Assistantships

Neuroimaging in Brain Abnormalities in Mood Disorders (Copenhagen)

Session 1 (May 21 - June 12, 2024), 3 credits

- Health and Gender Inequities: Past, Present, and Future (Copenhagen)
- Human Health and Disease: A Clinical Approach (Copenhagen)
- Medical Diagnostics (Stockholm)

- Neuroscience of Emotion (Stockholm)
- Public Mental Health (Stockholm)
- Social Brain: Neuropsychology of Social Behaviors (Copenhagen)
- Statistics (Stockholm)

Session 2 (June 16 - July 5, 2024), 3 credits

- Arctic Ecology (Copenhagen)
- <u>Climate Change and Glaciers</u> (Copenhagen)
- European Biodiversity (Copenhagen)
- European Clinical Psychology (Copenhagen)
- Healthcare Systems: A Comparative Approach (Copenhagen)
- Human Health and Disease: A Clinical Approach (Copenhagen)
- Medical Biotechnology and Drug Development (Copenhagen)
- Neuroscience of Fear (Copenhagen)
- Precision Medicine: Tailored Treatment in Clinical Practice (Stockholm)

Session 3 (July 8 - July 27, 2024), 3 credits

- Cognitive Neuroscience of Consciousness (Copenhagen)
- Molecular and Cellular Neuroscience (Stockholm)
- Public Health Policy in Practice (Stockholm)
- Sports Medicine: Performance Management and Fatigue (Copenhagen)

Program Director



Susanne Dietrich

Ph.D. (Biomedical Sciences, University of Porto, Portugal, 2007).

- M.S. (Biotechnology, De Monfort University, UK, and Karolinska Institutet, Sweden, 1998).
- Licenciatura (Microbiology, Portuguese Catholic University, Portugal, 1997).

Post-Doctorate positions in immunology and neuroimmunology, University of Lund, Sweden and University of Copenhagen, Denmark. With DIS since 2011

Faculty

All DIS faculty have advanced degrees from renowned institutions, and real-life experience from working in a professional setting. They have a deep understanding of the topics they cover and can tailor their teaching to students' interests because of the small class sizes.