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1. Formal educational training:

2023-2024 Lecturer Training Programme (LTP) completed at SDU.

2. Administrative tasks relating to education:

• Organization and examination for PhD course “Biostatistics II”.
• Organization and examination for master course “Introduction to Basic Biostatistical Concepts and Regression (DS812)”.
• Organization and examination for master course “General Regression Models (survival and longitudinal data) (DS818)”.
• Planning, organization, and examination for the biostatistics part of the master course "Evidensbaseret lægemiddelanvendelse og biostatistik".

3. Experience of study programmes, supervision and examinations:

Teaching:

• PhD course: Biostatistics II- 6 ECTS (Spring and Fall semesters, 2021, 2022, 2023 and 2024) (85 hours)

• Master course: Introduction to Basic Biostatistical Concepts and Regression (DS812)- 5 ECTS (Fall 2022, and 2023) (48 hours)

• Master course: General Regression Models (survival and longitudinal data) (DS818)- 5 ECTS (Spring 2022, 2023 and 2024) (63 hours)

• Master course: Evidensbaseret lægemiddelanvendelse og biostatistik – Biostatistik- 5 ECTS (Fall -2023) (30 hours)

• PhD course: Mixed models in Health Science- 1.8 ECTS (Spring 2022) (6 hours)

• Master course: Applied Biostatistics- 7.5 ECTS (Spring 2023, and Spring 2024) (9 hours)
Invited lecturer
• PhD course: Advanced Biostatistical methods in Health Sciences: a bootcamp course- 1.5 ECTS (Fall 2021)

• PhD course: Design and analysis of epigenome-wide association studies (EWAS)- 3.2 ECTS- (Spring 2018)
Invited lecturer. Giving lecture about Weighted gene correlation network analysis
• PhD course: Analysis of microarray gene expression data- 4 ECTS- (Spring 2017)
Teaching assistant
• 2011-2014 High school Mathematics teacher
• 2007-2012 Part-time Mathematics teacher (private tutoring)

Supervision:

I currently supervise three master students from Data Science, SDU. Since 2019, I have supervised, co-supervised, eight master students and advised/mentored four PhD students. Additionally, supervision service in biostatistics (Jan 2021-Present) for PhD students and researchers at the Faculty of Health Sciences, SDU.

Examination:

• Biostatistics II- Spring & Fall, 2021, 2022 and 2023. (Project report and Oral exam)
• Introduction to Basic Biostatistical Concepts and Regression (DS812)- Fall 2022 and 2023. (Project exam)
• General Regression Models (survival and longitudinal data) (DS818)- Spring 2022 and 2023. (project report and Oral exam)
• Evidensbaseret lægemiddelanvendelse og biostatistik – Biostatistik exam- Fall 2023. (Written exam)
• Master defense for Data science at SDU- June 28, 2023 and June 14, 2024.

4. Methods, materials, and tools:

My teaching modes include face-to-face, flipped, online and blended teachings. My teaching methodologies incorporate lectures, computer programming, and group-based activities, applying e-learning tools such as Polls, and online discussion forums to enhance student engagement and interaction. I have extensive experience in research-based teaching through the supervision of PhD students, master's students, and researchers. Additionally, I have experience with written project exams and oral exams, ensuring a comprehensive evaluation of student learning outcomes.

5. Teaching philosophy and pedagogical idea:

My teaching philosophy focuses on creating a dynamic learning environment that helps students to understand statistical and machine learning methods. I am deeply committed to improve student's self-efficacy, helping them to see their strengths through providing constructive feedback and create an autonomy learning environment where they feel confident to succeed and their perspectives are acknowledged. I always practice research-based teaching in my classes by bridging the presentation of theoretical concepts with real-world examples drawn from my own research or others research to vividly illustrate the applicability of specific methods and techniques. I believe in promoting active learning by engaging students such as using just-in-time-teaching approach which required students to complete online activities before class (e.g., online tools like Poll Everywhere), fueling curiosity and critical thinking. Simultaneously, using peer instruction which emphasized student-student and teacher-student interactions during class, fostering discussions and feedback loops. The combination of these approaches proved instrumental in shaping a continuous feedback loop, enhancing the learning experience both inside and outside the classroom. By creating a supportive classroom and being an effective communicator, my goal is to inspire students to to engage deeply with their learning. As an active researcher, I believe my teaching contributes to my research and vice versa. I supervise students in projects related to my research, helping them gain essential skills and experiences for their future.