

# D2V Spotlight

Dr. Andrey Soares, D2V Scholar

---



D2V is thrilled to welcome our inaugural fellow for the D2V Scholars Program, Dr. Andrey Soares. Dr. Soares will begin his two-year fellowship with us on July 1. He comes to us from the [Computational Bioscience and Informatics Training](#) (CBIT) program.

Previously, Dr. Soares was an Associate Professor in the School of Information Systems and Applied Technologies at Southern Illinois University. He has also worked in a variety of roles in the computer science industry and holds a Ph.D. in Information Sciences and Technology from Pennsylvania State University.

We spoke to Dr. Soares about what prompted him to move into a new field, what excites him about his research, and how he hopes to develop during his time with D2V.

***Your background is primarily in computer science and information technology, and you were on the faculty at Southern Illinois University. What inspired you to change your research focus and career trajectory?***

A few years back, I was introduced to Health Informatics when I started collaborating with a professor from the School of Allied Health at Southern Illinois University on a tobacco cessation project. I always had interest in applied research and to translate ideas into practice, and I was fascinated with the opportunity to work on projects that have potential to help people to treat and manage their health with support from Computer Science and Information Technology approaches. Since then, I have learned more about the field and have had the chance to interact with other health care professionals and educators, including collaboration with professors from the Radiologic Sciences program and the Communication Disorders and Sciences program at SIU.

Through these collaborations, I recognized the potential and opportunities to work on health-related research using modern computational approaches. I saw the need to communicate and bridge ideas between the health and IT fields, and understood that I needed more training and experience in the health field as well as in modern technologies such as data science. I realized that after a successful career as faculty teaching students to build applications, I wanted to actually be part of the fun and do the work myself. I knew that to be more involved in research, I would have to move from a teaching environment to a research-intensive institution where I would have opportunities to focus more on research and collaborations, and seek funds to support and expand my research projects.

After being promoted to Associate Professor in 2016, I decided to do a postdoc as part of my annual leave. I was fortunate to be accepted for a one-year fellowship in the Computational Bioscience Program here at CU Anschutz, and to have Dr. Sonia Leach as my mentor. My time as a postdoc has been fantastic! I improved my skills, learned new technologies, defined new research projects, and established new collaborations. And naturally, it confirmed and gave me confidence about making a career change.

***What drew you to D2V specifically?***

The D2V Scholars Program is a tremendous opportunity for me to use my interests, skills, and expertise to develop a research program that would position me to be an independent researcher in this exciting field. It is also a great opportunity for me to contribute to the D2V initiative addressing the implementation and dissemination of patient-centered value care through my research. My primary research interests focus on data science and analytics applied to health/clinical informatics with the goal of translating discoveries into practice, and developing data-driven solutions for healthcare providers to offer quality personalized services to patients at the point of care. In particular, I am interested in developing clinical decision support systems that can provide evidence-based recommendations from the analysis of electronic health data. This fellowship will also provide me with invaluable opportunities to collaborate with D2V mentors and to learn about overlapping interests and different projects related to data science and health services research.

***What do you hope to accomplish during your fellowship?***

I expect to seek advice from and collaborate with D2V mentors as I progress through the proposed research project. For this fellowship, I propose to investigate the use of natural language processing and machine learning methods to analyze electronic health records to identify important factors that can inform decisions and improve patient-centered value care. Besides continuing work on my current tobacco-related research, I will also explore electronic health records to track outcomes and quality measurements such as re-admissions, adverse effects and complications. The overall goal is to transform health data into valuable information for personalized care. I look forward to discussing these goals with D2V mentors to explore data analytics techniques to identify alternative ways to explore and visualize complex data. In addition, I hope to get a good understanding and practice of research in value-based care, and be able to use data science approaches to propose and build solutions for quality patient services. I also expect to publish results of my work and develop preliminary data for future NIH grant proposals.