

Education

M.Ed., Curriculum and Instruction | University of Illinois | Champaign, IL 2002
B.S., Ecology, Ethology, and Evolution | University of Illinois | Champaign, IL 1998

Professional Experience

Director of Curriculum Development CT-STEM Project | Northwestern University | Evanston, IL, USA 2016 – 2019

- Co-Developed and coached implementation of multiple science units with 16 teachers across 3 high schools incorporating computational thinking practices
- Managed the design, development, and administration of [CT-STEM](#) interactive e-learning website with over 200 teachers registered
- Managed 10-12-person curriculum team consisting of graduate students and post docs
- Assisted in the design and implementation of numerous professional developments for partner teachers
- Designed and implemented summer Research Experience for 4 teachers over 2 consecutive summer workshops
- Member of [CCL Lab](#), [TIDAL Lab](#), and [CT-STEM Project](#) and CT-STEM 5 person steering committee
- Presented at Computational Thinking workshop at 2016 NSTA Conference in Nashville

Science Teacher | [International School of Panama](#) | Panama City, Panama 2013 - 2015

- Taught Biology, Physics, and IB Environmental Systems and Societies for grades 9-12
- Utilized Canvas, Google sites, and other technologies to facilitate interaction with students

Science Teacher | [Uruguayan American School](#) | Montevideo, Uruguay 2011 - 2013

- Taught General Science, Life Science, Physical Science, Biology, and AP Biology for grades 6-12
- Utilized PowerSchool, Google sites, and other technologies to differentiate instruction

IB MYP Curriculum Coordinator | [The Codrington School](#), Barbados 2010 – 2011

- Assisted and trained teachers on administration of IB Middle Years Program curriculum
- Served as teacher mentor for new/inexperienced teachers
- Involved in the integration of Moodle, ManageBac, Wikis, and other digital tools in instruction

Science Teacher | [The Codrington School](#) | Barbados 2008 – 2011

- Taught Technology, Integrated Science (Biology, Chemistry, Physics), and IB Diploma Biology
- Developed curriculum for all secondary school sciences and implemented annual secondary school science fair

Area Science Instructional Specialist | Chicago Public Schools | Chicago, IL 2007 – 2008

- Served as instructional coach to over 30 new and freshman level teachers at over 20 public high schools
- Planned and implemented professional development for over a 100 teachers and administrators in curriculum planning, data analysis, technology integration, literacy, and school improvement

Science Teacher | Hyde Park Academy | Chicago Public Schools | Chicago, IL 2004 – 2007

- Served as Head of Science Department and IB MYP Personal Project Manager for a school of 2000 students
- Taught Biology, Environmental Science, IB MYP Chemistry

Biology Teacher | York Alternative HS | Chicago Public Schools | Chicago, IL 2002 - 2004

- Taught and mentored student inmates located within the Cook County Department of Corrections
- Taught in after-school programs: Evening High School, General Education certification, Adult Literacy, and Computer classes to both student and adult inmates

Technology Consultant | Stratton Elementary | Champaign, Illinois 2001-2002

- Served as troubleshooter for technology and computer related equipment
- Instructed teachers in the usage and maintenance of educational technology

Graduate Teaching Assistant University of Illinois, College of Education Champaign, IL	2001-2002
<ul style="list-style-type: none"> • Taught classes of technology integration in education to pre-service teachers • Instructed pre-service teachers in the development of a website and online portfolio 	
Department Webmaster University of Illinois, College of Education Champaign, IL	1999-2002
<ul style="list-style-type: none"> • Rebuilt departmental website and integrated it into the college intranet • Built and maintained websites for professors within the department 	
Research Biologist University of Illinois Cancer Center Chicago, Illinois	1998-1999
<ul style="list-style-type: none"> • Conducted scientific research using current techniques in cancer biology • Worked on the formation of a human tumor bank and procurement facility 	

Certification

Illinois Secondary Teaching Certification	2002
<ul style="list-style-type: none"> • HS (9-12) Biology, Botany, Chemistry, General Science, Physics, and Zoology • MG (6-8) Biological Science, General Science, Language Arts, and Physical Science 	

Courses and Training

• IB Diploma (Science) Montezuma, New Mexico	2004
• IB MYP Summer Institute (Science) Chicago, Illinois	2005
• IB MYP Level II (Science) Norfolk, Virginia	2005
• IB MYP Level III (Science) Montreal, Canada	2005
• IB Diploma Level II (Biology) Berlin, Germany	2010
• IB Diploma Level III (Biology) online course	2012
• AP Biology Inquiry Labs online course	2012
• IB Diploma Level II (Environmental Systems and Societies) Montezuma, New Mexico	2013
• Powerful Tools for Teaching and Learning: Web 2.0 Tools online course	2014
• Differentiation: A strategy for all students online course	2015
• Design of Technological Tools for Thinking and Learning (LS 426) Northwestern University	2016
• Annual Educational Coaching Conference Northwestern University	2016
• Google Classroom online course	2017
• e-Learning Ecologies: Innovative Approaches to Teaching and Learning for the Digital Age online course	2018
• The Ultimate Guide to Game Development with Unity online course	2018
• The Odin Project Online course	2019
• Build Responsive Real-World Websites with HTML5 and CSS3 Udemy Online Course	2019

Publications

- Arastoopour Irgens, G., Dabholkar, S., Bain, C., Woods, P., Hall, K., Swanson, H., Horn, M., & Wilensky, U. (in review). Modeling and Measuring Students' Computational Thinking Practices in Science. Journal of Science Education and Technology
- Swanson, H., Arastoopour Irgens, G., Bain, C., Hall, K., Woods, P., Rogge, C., Horn, M., Wilensky, U. (2018). [Characterizing Computational Thinking in High School Science](#). In Kay, J. & Luckin, R. (Eds.), Rethinking Learning in the Digital Age. Making the Learning Sciences Count: Proceedings of the 13th International Conference of the Learning Sciences Vol. 2, 871-878

Technical Skills

- **OS:** Mac iOS, Windows, Android/Chrome, Ubuntu, Kali Linux
- **Software:** HTML5, CSS3, NetLogo, Git, Office, Visual Studio, Google Classroom, Canvas, Moodle, Scratch, Unity, Video/Audio editing, e-learning tools
- **Hardware:** Build and repair of computers, Virtual Reality (Oculus), Raspberry Pi