

JENNIFER H. DERKITS

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CAREER OBJECTIVE: To complete a doctoral degree in Genomics and continue to pursue a career in teaching and research.

EDUCATION:

Master of Science in Biology, 2013

Virginia Commonwealth University, Richmond, VA

Bachelor of Science in Biology, Minor: Psychology, 1998

Longwood University, Farmville, VA

MASTER'S THESIS: Genetic and Molecular Analysis of Canalization at the Maize *r1* locus

PROFESSIONAL EXPERIENCE (RESEARCH):

Virginia Commonwealth University, Richmond, VA

Fall 2010- May 2013

Research Assistant

- Genetics laboratory and Genetics Lecture. Mentored undergraduates in various laboratory techniques and assisted in the coordination of an undergraduate partnership with industry.
- Developed a maize colorimetric scale for determining statistical significance of phenotypic kernel color with genes associated at the *r1* locus.

WYETH, Richmond, VA

June 1999 – January 2009

Research and Development Scientist III

- Authored several standard operating procedures.
- Kept detailed records of all experiments and procedures for private patents and FDA audits.
- Conducted numerous meetings, both domestic and international, to problem solve and provide critical thinking.
- Called upon to problem solve major consumer product issues from manufacturing through supply chain including the analytical chemistry
- Mentored and managed several junior scientists both from an administrative and laboratory perspective
- Instructed laboratory personnel on all standard operating procedures for FDA and laboratory guidelines, mentored new employees on all aspects with respect to product development and managed day to day activities (Assistant Training Coordinator for analytical labs)
- Developed, validated and transferred new product methods and design using HPLC (Technical Supervisor)
 - Developed a process to shorten the time involved in the isolation of analytes by using a type of liquid nitrogen treatment
 - Validated three data handling systems: TurboChrom, TotalChrom and Empower. These were all used to collect, visualize, quantitate and statistically analyze chromatography data
 - Founding member of Innovation group: Assisted in the development of new products and design while fostering collaboration between scientists of various backgrounds and

designed the 1st annual supplier meeting in order to link scientists with new technologies post 2007.

RESEARCH INTERESTS:

- Genetics/Genomics
- Cellular and Molecular Biology
- Bioinformatics

RESEARCH SKILLS

Analytical | Detail Orientation | HPLC | Gel Electrophoresis | Southern Blot | Wet Chemistry | Time Management | Sample Chromatography

TECHNOLOGY

Microsoft Office Applications | JMP statistical software | Turbochrom | Totalchrom | Empower

PROFESSIONAL EXPERIENCE (TEACHING)

J. SARGEANT REYNOLDS COMMUNITY COLLEGE, Richmond, VA

Fall 2013 – Present

Adjunct Instructor: Introductory Biology 101 & 102

- Developed an online learning environment for curriculum instruction and administered weekly laboratory sessions.
- Developed and implemented course syllabi and expectations.
- Utilized various communication tools to ensure timely feedback with students.
- Facilitated distance learning through the use of lectures, group assignments, case studies discussion boards, and individual assignments.
- Rated 4.6-5 on all student evaluations for 8 consecutive years.
- Emphasized research and the scientific method for use in biology as well as for everyday life.
- Used online learning management systems to facilitate distance learning and collaboration to in-classroom instruction.
- Evaluated and utilized Pearson, Open Stax, Mc-Graw Hill Connect, Mastering Biology and Labster
- Assisted in the development of a new Biology 101&102 laboratory manual.
- Provided students with instruction on gel electrophoresis, anatomy, physiology, genetics, statistics, hypothesis testing, evolution, ecology and cell biology.
- Worked with a diverse population of students including ESL students and students with disabilities. Worked to develop strategies to help all students be successful with writing, laboratory experience, and evaluation.

Adjunct Instructor: Genetics Lecture and Lab

- Developed syllabi for online, hybrid and traditional classroom environments for introductory genetics lecture and laboratory course.
- Facilitated discussions for both online and classroom with current discoveries and controversies within the field including topics on molecular genetics, epigenetics, mendelian genetics, bioinformatics, cellular biology and statistics.
- Worked with students individually on the writing of laboratory reports, and topics in genetics research reports.

Lead Graduate Teaching Assistant: Genetics 310

- This course introduces and continues the students learning of laboratory safety, probability, Mendelian genetics, population genetics, transmission genetics, epigenetics, model organisms, basic biological concepts such as mitosis and meiosis, molecular techniques, and sterile techniques.
- Assisted in development and implementation of syllabi, laboratory exercises, curriculum content (for both lecture and laboratory), leading 6-8 additional graduate assistants, and examinations.
- Conducted individual conferences with students about research presentation writing/presenting and grades.

PROFESSIONAL DEVELOPMENT (RESEARCH & TEACHING)

Technological Development- Chromatography	2000-2003
Technological Development for international product development	2000-2008
Managerial Development Program	2003
Several Innovation Design Clinics	2008-2009
Faculty Learning Community – Focusing on outcomes-based assessment through the development of targeted objectives and assessment practices	2015 – 2016
Technology Enriched Instruction – Microsoft Fellow	2015
TOP Teaching Online Program, Certified Online Instructor	2014
Instructional Design for Online Learning	2015
Teaching technology in higher education	2012
Open Educational Resources	2019
Canvas Technology Resources	2020
ACUE Course in Effective Teaching Practices	2021
Metro Richmond STEM Fair judge	2014-2017
Junior Sciences and Humanities Judge	2021

TEACHING SKILLS

Curriculum Development| Pedagogy | Differentiated Instruction | Lesson Planning| Training
 Online, Hybrid, Face-to-Face Instruction | Project Planning | Project Management
 Team Leadership Facilitation | Organization | Workload Prioritization | Team Player
 Time Management | Detail Orientation

INSTRUCTIONAL TECHNOLOGY

Social media websites | Yammer | Padlet | McGraw Hill-Connect | eSciences Lab Kits | Webinar Software | Zoom |
 OpenStax | Canvas | Blackboard| Labster

PRESENTATIONS/PUBLICATIONS

A comparison of the traditional classroom versus “flipping the classroom” in general biology, 2014
 Maize Genetics Conference: Canalization at the *r1* locus in Maize, 2013
 First Annual Supplier Meeting, 2007
 Led “How to be a Team” workshop (Sherwood Consulting), 2005
 Designed and Implemented 3-day conference on Method Transfers, 2003

AWARDS/PROMOTIONS

Graduate Teaching Assistantship	Fall 2011 – Spring 2013
Waller-Hibbs Scholarship	Fall 2012
Tri-Beta	1995 – 1998
Research & Development Scientist I	2000
Research & Development Scientist II	2004
Research & Development Scientist III	2007
Innovation position	2007
