

# Deborah J. Good

## Curriculum Vitae

### Professional Preparation

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
SUNY College at Fredonia	B.S.	06/1987	Biomedical Research
Northwestern University	PhD	12/1992	Molecular & Cellular Biology
NIH, NCI, Bethesda	Post-Doc	1993-1997	Molecular Neuroendocrinology

### Appointments

YEAR	POSITION
1997	Assistant Professor, UMASS, Amherst
2003	Tenure awarded, Associate Professor, UMASS, Amherst
2006	Associate Professor, with tenure, Virginia Tech
2012	Visiting Scientist, Max Planck Institute for Heart and Lung Research, Bad Nauheim, Germany
2015	Faculty of Health Sciences, VT Carilion Medical School
2017	Member, Center for Transformative Research on Health Behaviors
2019-2020	Associate Department Head, Diversity and Inclusion, HNFE

### Representative Publications/Patents

Kocher, M.A., Huang, F., Le, E., and Good, D.J. (2021) Snord116 Post-transcriptionally Increases Nhlh2 mRNA Stability: Implications for Human Prader-Willi Syndrome, *Human Molecular Genetics*, 12:1101-1110; [Article Link](#)

Good, D.J. (2021) Editorial: New Gene Targets in the Study of Hypogonadotropic Hypogonadism, *Molecular and Cellular Endocrinology*, 520: 111077. doi: 10.1016/j.mce.2020.111077 [Article link](#)

(2021) VTIP 21-068: Reversal of Prader-Willi Syndrome Symptoms with Tonalin Conjugated Linoleic Acid

U.S. Provisional Application No. 63/184,001, Deborah J. Good, Inventor

(2021) VTIP 21-069: Supplemental Tonalin Conjugated Linoleic Acid Can Improve Male Hypogonadism

U.S. Provisional Application No. 63/184,029, Deborah J. Good, Inventor

A.S. Anderson, and Good, D.J. (2020) Self-Perceptions of Critical Thinking Skills in University Students are Associated with BMI and Exercise, *Journal of American College Health*, p1-7, [10.1080/07448481.2020.1803879](https://doi.org/10.1080/07448481.2020.1803879)

Good DJ. A low-cost, in silico nutritional genomics course-based undergraduate research experience applicable to multiple disciplines. *Biochem Mol Biol Educ*. 2020 Apr 11;. doi: 10.1002/bmb.21352. PubMed PMID: 32277791. [Link](#)

Ferqueron, T.R., Anderson, A.S. and Good, D.J. (2020) The Allele Frequency of the HFE gene mutation H63D (rs1799945) and Its Relationship to a Hereditary Hemochromatosis Diagnosis in Metabolic Nutrition Students at Virginia Tech, *American Journal of Undergraduate Research*, 16(4):51-57. [Link](#)

Good, D.J., Anderson, A.S., and Hulver, M.W. (2018) Metabolic Nutrition: An Everyday Approach to Macronutrient Metabolism, Kendall-Hunt Publishers, Dubuque, IA, ISBN 9781524974305 [Publisher's Link](#)

Good, D. J. (2018) *Transcriptional and post-transcriptional regulation of hypothalamic energy balance genes*. Chapter 3, In Textbook of Energy Balance, Neuropeptide Hormones, and Neuroendocrine Function. E. Nillni, Editor, Springer International Publishers, ISBN-13: 978-3319895055, pp55-73 [Amazon.com Link](#)

Good, D.J., (2017) Practical Metabolic Nutrition: A systems approach to vitamins and minerals. Kendall-Hunt Publishers, Dubuque, IA, ISBN 978-1-4652-6824-2 [Publisher's Link](#)

### Research Leadership

- 2011 Society, Culture, and Environment (ISCE) and the Fralin Life Sciences Institute (Fralin), Intergenerational Obesity Initiative, "Maternal Nutrition and Offspring Predisposition to Development of Metabolic Disease: Mitigating or Exacerbating the Effects of Fetal Programming Through the Choice Environment", **\$15,000**, coPI with Dr. George Davis and Dr. Renee Prater
- 2011 CIDER Instructional Enhancement Grant, "*Critical Thinking Skills in a Large Lecture Class – Effects of Body Weight and Exercise*" **\$2000**
- 2015 4VA Competitive Research Grant "*Development of an Interactive Human Body Digital Reusable Learning Object (RLO) to Provide Whole Body Systems-based Learning in Vitamins and Minerals*" **\$22,000**
- 2016 Institute for Creativity, Arts, and Technology, Mini-SEAD grant Human-Computer Interactions with a Web-Based Interactive Digital Learning Object, "*Human-Computer Interactions with a Web-Based Interactive Digital Learning Object*", **\$3000**
- 2017 College STAR Supporting Transition Access and Retention: A UNC System Initiative Supporting Students with Learning Differences) Case Study Grant, "*Blending Large Classrooms-A strategy for flipping while trying not to completely flop!*", **\$1500**

- 2017 Howard Hughes Medical Institute “Building Inclusive Excellence in the Sciences at Virginia Tech, **\$998,046** (direct costs), coPI with Dr. Jill Sible, Dr. Sarah Karpanty, Dr. Mike Bowers, and Dr. Michele Deramo.
- 2017 Foundation for Prater-Willi Research “The NHLH2-SNORD116 pathway: mechanistic insights into the molecular basis of Prader-Willi Syndrome” **\$100,000** (direct costs) (PI)
- 2017 Adaptive Brain & Behavior, Institute for Critical Technology and Applied Science (ICTAS), Virginia Tech, “Analysis of SNORD116@ locus: an orphan non-coding RNA deleted in Prader-Willi Syndrome” (PI), with Fenix Huang (coPI) and David Xie (coPI) **\$20,000** (direct costs)
- 2018 Adaptive Brain & Behavior, Institute for Critical Technology and Applied Science (ICTAS), Virginia Tech “Professional Development-Training at Columbia University”, **\$1380.50** (total costs)
- 2018 NIH R25DK112735 “*The Translational Obesity Undergraduate Research “TOUR” Summer Scholars Program*”, \$517,870 total costs, Co PI with Dr. Samantha Harden, **\$517,870** total costs.
- 2018 CIDER Instructional Enhancement Grant, “*Synergizing sequence courses across CALS: A case study in BCHM & HNFE*” **\$2000**
- 2019 BASF Corporation, makers of Tonalin™ CLA, “Reversal of PWS symptoms in SNORD116 mutant mice with Tonalin™ conjugated linoleic acid supplementation.”, **\$105,825**, (total costs, year one)
- 2019 Adaptive Brain & Behavior, Institute for Critical Technology and Applied Science (ICTAS), Virginia Tech, “Identifying neural mechanisms underlying exercise motivation in normal and sedentary rodents”, coPI with Julia Basso (PI), and Daniel English (coPI) **\$20,000** (direct costs)
- 2019 Office of Undergraduate Research. “*Course-Based Undergraduate Research Experience: Genotype/Phenotype Analysis with Students in Metabolic Nutrition*”, with Angela Anderson, **\$12,300**
- 2020 Office of Undergraduate Research. “*Course-Based Undergraduate Research Experience: Genotype/Phenotype Analysis with Students in Metabolic Nutrition*”, with Angela Anderson, **\$4225**, year two award

#### **Leadership and Professionalism: Synergistic Activities**

- As president of the Virginia Tech Chapter of Sigma Xi, brought in a Distinguished Lecturer, worked with the Center for Communicating Science to start Science on Tap, and received a Chapter of Excellence Award.

- Creation of the Scholars Undergraduate Research Program in the Department of Human Nutrition, Foods, and Exercise at Virginia Tech. This program has provided summer fellowships for over 100 students to participate in research since 2007. The program has been continuously funded using internal grants, USDA and NIH grants since 2007.
- Inventor on 4 patents. The most recent two are based on work to try to develop a simple, cost-effective weight-loss treatment, and puberty booster for individuals with Prader-Willi Syndrome.
- Developed 2 experiential learning courses to help students gain more laboratory and research experiences within our department.

### **Commitment to Diversity and Inclusiveness**

- Served as Associate Department Head for Diversity and Inclusion for 2 years.
  - Diversity and Inclusion Representative to the College
  - Monthly newsletters and notices about current events
  - Faculty meeting reports and trainings on Inclusive Pedagogy
- coPI on a Howard Hughes Medical Institute grant to increase inclusive pedagogy at Virginia Tech.
  - Overseeing \$1,000,000 grant with multiple department and faculty working groups.
  - Within our department, increased experiential learning opportunities, partnered with HokieHealth to bring training as Addition Recovery Allies to VT, updated first year experience courses-especially for transfer students and first generation students.
  - Used some of the grant money as an Inclusive Pedagogy Fellow to nominate and pay for membership of undergraduates and high school science students in Sigma Xi.
- coPI on an internal grant to bring in workshop facilitators for “Inclusive Pedagogy Through the Lens of Health, Nutrition, and Exercise”.
- Have mentored many graduate students from diverse backgrounds, including first generation, black, Hispanic, foreign, and transfer students.

### **Mentoring**

- Mentored 3 postdoctoral fellows who have gone on to successful careers in academia and industry
- Mentored 20 graduate students
  - 2 have been awarded Sigma Xi Grants in Aid of Research
  - 1 was a 2020 Sigma Xi Oral Presentation Award Winner
  - 3 have received Endocrine Society Awards for their Research
  - 3 have received others scholarly awards
  - 2 are current students, 3 are in industry jobs, 3 are assistant or associate professors, and remaining are in medicine, or other careers.
- As part of the Scholars Undergraduate Research Program, I have mentored over 100 students during their summer fellowship program.
- Mentored 37 undergraduate students in my laboratory
  - Students have received Fralin Fellowships, Pratt Fellow Awards, ACC Research Conference selection, MAOP program, McNair Fellows program, Thye Fellowship.
  - Undergraduates have gone on to veterinary school, medical school, Ph.D. programs, and careers in sciences

**Major Awards, Fellowships, Invited Lectureships, and Honors**

2019	HHMI Inclusive Excellence Fellow, Virginia Tech
2019	Distinguished Alumni Award, SUNY-Fredonia
2018	Scholarship of Teaching and Learning Award
2016	CIDER “Teacher of the Week”, October 17-21, 2016
2010	College of Agriculture and Life Sciences, Basic Research Award
2005	UMass Assessment of Student Learning with Technology Award
2004	Outstanding University Advisor, finalist
2001	Lilly Teaching Fellowship
1997	NIH Fellows Award for Research Excellence
1992	Sigma Xi Graduate Research Competition, First Place Award

**Major Career Contributions and Legacy**

- Identified NHLH2 as the first transcription factor linked to adult-onset obesity.
- Subsequently identified NHLH2 as involved in hypogonadotropic hypogonadism, obesity in humans, and Prader-Willi Syndrome.
- Successfully developed an undergraduate research program at Virginia Tech.
- Directly mentored ~150 individuals in my laboratory, or the Scholars program.
- Secured over \$4 million in grants for research, teaching and service.