

EDUCATION University of Virginia, Charlottesville VA | Distinguished Major in Human Biology, Class of 2018
GPA: 3.93 / 4.00, Graduated with Highest Distinction (summa cum laude)

ACADEMIC HONORS **2019 Rhodes Scholarship Finalist, District 9**
Echols Scholar, UVA

- “Predicated upon the Jeffersonian ideal of freedom of inquiry” this award goes to “the University’s most intellectually curious, broad thinking, and self-motivated students and its most avid learners.”
- Scholars are exempt from all competency requirements and provided priority class registration.

2017 Robert Kent Gooch Scholarship (\$15,000), UVA

- As “one of the highest forms of recognition bestowed by the College,” this scholarship goes to one who embodies “the qualities of mind and character requisite for the selection of Rhodes Scholars.”

UVA Fellow, 2018 ACC Meeting of the Minds, Boston College, April 6-8, 2018

- One of six undergraduate researchers selected to represent UVA at the annual conference.

LITERARY HONORS **2017 Kenneth L. & Lorraine M. Harkavy Scholarship (\$5,000), UVA**

- Awarded to one science major who “demonstrates merit and achievement in the arts.”
- Selected for my thesis and writing, integrating perspectives from data science, ethics, and the humanities.

2018 Patricia Hollingsworth Prize in Ethics (\$750), UVA

- Awarded 2nd prize in the University’s largest undergraduate literary competition, open to essays addressing any theoretical or applied issue in ethics. Paper submitted for publication (cited below).
P. H. Schroeder. “Dangers of the Data-Driven Equilibrium Shift in Medicine.” Under review for publication by *American Journal of Bioethics*. Manuscript: <http://philiphschroeder.com/AJOB.pdf>

SERVICE HONORS **2018 Virginia Emergency Medical Services Scholarship (\$2,300), Virginia Department of Health**

- Statewide scholarship awarded to promising young pre-hospital providers to fund paramedic training.

UVA Delegate, 2018 ACC Leadership Symposium, Duke University, February 9-11, 2018

- One of five student activists selected to represent UVA at the annual symposium.
- Chosen to present Epi along with my efforts in the city during and following the Aug. 12th Charlottesville riots, with the 2018 symposium theme of “Contentious Times: A Call for Courageous Leadership.”

2018 Raven Society Inductee, UVA

- Founded in honor of the University’s most famous poet, Edgar Allen Poe, the Raven Society stands as UVA’s “most prestigious honorary society,” committed to “leadership and idealistic determination.”

RESEARCH HONORS \$2,200 - Institute for Practical Ethics & Public Life Award
\$5,000 - National Science Foundation Multi-Scale Systems Bioengineering REU
\$1,000 - Semester Scholars Award, UVA
\$3,000 - Minerva Award, UVA

MAJOR PAPERS Details on all projects at: <http://philiphschroeder.com/7.html>

P. H. Schroeder, N. J. Napoli, W. F. Barnhardt, L. E. Barnes, J. S. Young. Aug 2018. “Relative Mortality Analysis Of The ‘Golden Hour’: A Comprehensive Acuity Stratification Approach To Address Disagreement In Current Literature”, *Prehospital Emergency Care*, DOI: [10.1080/10903127.2018.1489021](https://doi.org/10.1080/10903127.2018.1489021)
PubMed Link: <https://www.ncbi.nlm.nih.gov/pubmed/30118362>
Access Full Manuscript: <http://philiphschroeder.com/PEC.pdf>

R. Z. Wang, C. H. Sun, P. H. Schroeder, M. K. Ameko, C. C. Moore and L. E. Barnes. Jun 2018. "Predictive Models of Sepsis in Adult ICU Patients," *2018 IEEE International Conference on Healthcare Informatics (ICHI)*, New York City, NY, USA, June 2018, pp. 390-391. DOI: [10.1109/ICHI.2018.00068](https://doi.org/10.1109/ICHI.2018.00068)
Paper Link: <https://ieeexplore.ieee.org/document/8419401>

The above paper was an expansion of my logistic regression model, which I presented at the 2017 Biomedical Engineering Society Conference in Phoenix, AZ - abstract: <http://philiphschroeder.com/BMES.Abstract.pdf>

A. M. Young, P. H. Schroeder, C. L. Cramer, J. S. Young. “An Analysis of Effect of Transport Mode for Trauma Patients.” Under review for publication by *American Journal of Emergency Medicine*.
Manuscript: <http://philiphschroeder.com/AJEM.pdf>

P. H. Schroeder, D. A. Hazlett, K. E. McCain, S. Z. Narmeen, T. K. Puhl, R. S. Valdez. “Exploring psychosocial challenges in type-1 diabetes self-management during transition to college as a foundation for informed design of personalized technological aids.” Preparing to submit for publication in *Applied Clinical Informatics*.
Manuscript: <http://philiphschroeder.com/Appl.Clin.Inform.Manuscript.pdf>

ONGOING PROJECTS	<p>M. K. Kerwin, P. H. Schroeder, S. B. Sequiera. “IT-based approach to increasing utility of Beers’ and STOPP-START criteria in reducing inappropriate prescribing of geriatric patient medications.” Project overview: http://philiphschroeder.com/Geriatric.Med.Project.Outline.pdf</p> <p>P. H. Schroeder, W. F. Barnhardt, R. J. Anderson. “EPIERAS: Environment & Population Informed Emergency Resource Allocation System.” Project overview: http://philiphschroeder.com/EPIERAS.pdf</p>			
TEACHING	<p>Research Mentor for UVA medical students <i>May – Aug, 2018</i> <ul style="list-style-type: none"> ▪ Mentored 2nd-year UVA medical students who were selected to conduct funded projects in the 2018 Medical Student Summer Research Program with Dr. Jeffrey S. Young, UVA Trauma Center Director. <p>Lecturer, UVA Interdisciplinary Studies <i>Jan – May, 2018</i> <ul style="list-style-type: none"> ▪ Independently developed and taught, in the spring of 2018, a 2-credit UVA course on the ethical, legal, and cultural implications of the rise in data harvesting and machine-learning systems throughout society. Course syllabus: http://philiphschroeder.com/Syllabus.pdf <p>Basic Life Support Instructor, UVA Hospital <i>June, 2017 – Present</i> <ul style="list-style-type: none"> ▪ Train and recertify doctors, nurses, and other local medical providers in AHA Basic Life Support. <p>ESOL Tutor, Woodbrook Elementary <i>Sept, 2016 – May, 2018</i> <ul style="list-style-type: none"> ▪ Made weekly visits to Ms. Elizabeth Coppolino’s class to tutor Spanish-speaking ESOL students. </p></p></p></p>			
LEADERSHIP	<p>Captain, Charlottesville-Albemarle Rescue Squad <i>May, 2018 – Present</i></p> <p>Program Director & Volunteer, Adopt-A-Grandparent at Albemarle Health & Rehab <i>Aug, 2016 – May, 2018</i></p> <p>Chair of Mentorship & Public Relations, Echols Council, UVA Chair of Mentorship <i>June, 2017 – May, 2018</i> Public Relations Committee <i>Aug, 2016 – May, 2017</i></p> <p>Lead Intern & Moderator, Volunteers with International Students, Staff, & Scholars Recruitment, Outreach, and Media Intern <i>Aug, 2017 – May, 2018</i> Classroom Consultant (CC) Moderator <i>Sept, 2016 – May, 2018</i></p> <p>Executive Board Member, Global Literacy for Youth <i>Apr, 2017 – May, 2018</i></p>			
ETHICS & HEALTH INTERNSHIPS	<p>Through the various internships listed below, I worked with the Data Science Institute, Institute for Practical Ethics & Public Life, UVA Hospital, UVA Long Term Acute Care Facility, and three Level I trauma centers across Virginia in order to evaluate, from a perspective of both ethics and data science, the dangers and advantages of how patient data is used, at both the clinical and policy level, to make decisions that affect care.</p> <p>Institute for Practical Ethics & Public Life Summer Internship <i>May – Aug, 2017</i> <ul style="list-style-type: none"> ▪ 14 undergraduates selected from all fields of study at the University. <p>Internship in Clinical Ethics, UVA Center for Biomedical Ethics & Humanities <i>Aug – Dec, 2017</i> <ul style="list-style-type: none"> ▪ 12 undergraduates selected from areas of public health, medicine, and bioethics. <p>Bioethics Internship in Health Policy, UVA Center for Biomedical Ethics & Humanities <i>Jan – May, 2018</i> <ul style="list-style-type: none"> ▪ 16 students selected, including applicants from the UVA School of Law and graduate nursing program. <p>Inova Trauma Center Acute Care Surgery Externship, Fairfax, VA <i>June 5 – 16, 2017</i> <ul style="list-style-type: none"> ▪ 10 applicants from across the nation selected to serve in a 2-week externship </p></p></p></p>			
SKILLS	<p>Programming Languages: proficient with R, MATLAB, SQL; familiar with Python, JavaScript, C/C++.</p> <p>Operating Systems: Linux, UNIX, (experience in shell scripting), Mac OSX, Mac OS, Windows 10</p> <p>Algorithms: LDA, PCA, Regression Analysis (including regularization techniques), Bayesian Learning, k-NN, SVM, Neural Networks, k-means clustering, Decision Trees, Random Forest, AdaBoost.</p> <p>Wet Lab: Immunoassays (EIA, ELISA, RIA, FIA), immunohistochemistry, western blot analysis, nucleic acid purification and analysis, PCR, gel electrophoresis. (majority of training in wet-lab skills is course-related)</p>			
REFERENCES	<table border="0" style="width: 100%;"> <tbody> <tr> <td style="width: 33%; vertical-align: top;"> Lois L. Shepherd, JD Professor of Law UVA School of Law 580 Massie Rd Charlottesville, VA 22903 (434) 924-7409 lls4b@virginia.edu </td> <td style="width: 33%; vertical-align: top;"> James F. Childress, PhD Professor of Ethics & Public Policy UVA Batten School of Public Policy 1540 Jefferson Park Ave Charlottesville, VA 22904 (434) 924-6724 jfc7c@virginia.edu </td> <td style="width: 33%; vertical-align: top;"> Jeffrey S. Young, MD Professor of Surgery, Director of Trauma Center UVA Dept of Surgery 1300 Jefferson Park Ave Charlottesville, VA 22903 (434) 982-3549 jsy2b@hscmail.mcc.virginia.edu </td> </tr> </tbody> </table>	Lois L. Shepherd, JD Professor of Law UVA School of Law 580 Massie Rd Charlottesville, VA 22903 (434) 924-7409 lls4b@virginia.edu	James F. Childress, PhD Professor of Ethics & Public Policy UVA Batten School of Public Policy 1540 Jefferson Park Ave Charlottesville, VA 22904 (434) 924-6724 jfc7c@virginia.edu	Jeffrey S. Young, MD Professor of Surgery, Director of Trauma Center UVA Dept of Surgery 1300 Jefferson Park Ave Charlottesville, VA 22903 (434) 982-3549 jsy2b@hscmail.mcc.virginia.edu
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