

RACHEL ALFREDA NOBEL  
CANDIDATE STATEMENT

I am Rachel Alfreda Nobel, an assistant professor in the O'Neill School of Environmental and Public Affairs. When I was in high school, I became passionate about what I saw as the collision between expanding suburbia and the established farms around MyCity, MyState. In college I explored this clash through economic, social, and psychological lenses, and was motivated not only to analyze, but to help all sides understand each other: empowering people to interact with their environments. Recently, I have narrowed my active research focus from the broad terrain of human-animal-agricultural-natural environment interaction to the specific instance of support animals: or, where did you get that dwarf donkey and why?



I am applying for promotion to associate professor, and tenure. My area of excellence is research, and I am also proud of my contributions to teaching and service in O'Neill and at IUPUI. My research is highly interdisciplinary, informed by many different fields and also engaging students and colleagues across campus. While I have been a key contributor to several different work groups and institutes, my distinctive achievement has been to bring a micro-

economic and cultural analysis to the issue of support animals. While the popular view of support animals often is that "anything goes" and they "have no real importance," the support-animal locus is a key instance of human-natural engagement that raises serious ecological, sociological, and economic questions. Psychologists examine why people need support, if it is an animal or not; my analysis creates a new understanding of how engagement with—or reaction to--support animals reflects and improves, or damages, human interaction with and appreciation of the natural environment.

In this candidate statement I will first describe my research trajectory and emerging national recognition, centered on support-animal socio-cultural analysis. Some of this will also illustrate my contribution to the teaching mission of O'Neill, as my undergraduate and graduate courses flow naturally into teaching-and-learning research lab work. I will then specifically address my teaching activities. I will describe my service at the school, campus, and university levels, and return to the research focus with my service to both existing and emerging scholarly organizations relevant to support animal and other human-nature interaction themes.

I am especially proud that I have been able to engage underrepresented students in most levels of my work. Our introductory courses at O'Neill have highly diverse students, and I proactively design pathways for these students into higher-level ecological and environmental courses so that the concerns of diverse communities become an organic part of research and engagement. Human-nature interaction is inclusive of all humans, and all aspects of nature. I will discuss diversity and inclusion efforts in each area.

Research: Area of Excellence

I advance knowledge about support-animal interaction in two main threads: one which springs from the individual and personal interaction angle and one that springs from the economic and social angle. While these are situated within two different disciplines, I believe they are interrelated—that they do not occur in isolation but the personal influences the social, and the economic influences the individual.

With respect to the personal-individual interaction research, my dissertation of 2018 was a qualitative study of interviews conducted with 34 support-animal users and 12 psychologists who consulted with individuals requesting support-animals (not those treating the interviewed users). From this data, I formed a team consisting of an O’Neill graduate student, and Dr. Haakon Canute within IUPUI’s PsyD program and a graduate student there, to recruit patients who were interested in support animals. Dr. Canute was the lead author on J7 and J8 [links to CV] which examined personal and family dynamics within this decision-making. I led my part of the team in expanding interview topics to explore how these individuals related to the natural world in general. My most important publication from this stream is “Simply Animal Lovers Who Want a Pass? Personal and Environmental Motivation in the Support-Animal Selection Process,” *Annals of Psychology*, 2021. [J2 on CV]. The key finding was that those who already imaged themselves as animal-oriented, struggled more significantly than those who were non-pet owners, non-nature-oriented, when the idea of a support animal was suggested. They felt a stigma that obtaining a support animal was or would be seen as a merely personal preference, rather than a psychological need. In that sense, having a support animal actually deterred them from their previous advocacy for the natural environment.

I followed this key publication with data gathered from distinctly different populations: general undergraduates, and, local community members—people who did not have support animals, but parallel topics of attitudes towards support animals and attitudes towards nature were explored. My team produced five different articles from this work, of which the key publication is “Nature and Animals: are Support Animals Natural?” *Annals of Personal Ecology*, 2019 (J5). This work was supported initially by an internal IU grant [G3], and last year Dr. Canute and I secured, as co-PIs, a grant from the National Institute of Health, Center for Alternative and Complementary Medicine [G2].

The second research facet is a social and economic lens that explores the very under-researched aspect of the provision of support animals, within the agricultural economic niches of boutique/hobby farming and non-traditional animal production. That is, is the “support animal” an actual industry? Where do dwarf donkeys come from, anyway? Who raises support pigs, snakes, or birds? Are support animals diverted from other use or are they raised specifically for this purpose? It is a political-economic truism that where an industry exists, special interests exist and therefore lobbying and capture of regulation exist: self-awareness of an “industry” leads to public policy. It is not only persons who want support animals who have an interest in their use, it is those who train and sell support animals who seek to write and control legislation.

I organized a team with three areas of expertise to address this angle. The first was Dr. Janeway and her doctoral student team at the School of Informatics and Computing, which has expertise in mining social media data for advertising and commercial analysis. The second was Dr. JT Kirk at the Kelley School of Business who explores new-business formation especially in

non-traditional niches. The final piece is my own O'Neill team which has expertise in regulatory effects of environmental and agricultural legislation.

There are so far two key publications from this research stream. "A Family Business: Providing Support Donkeys is in Our Blood" in *Small Business Development* (J3), used Google and Facebook ads to identify 72 active support-animal-suppliers and did a content analysis of how the suppliers presented themselves. There were two significant findings: one is that forty percent of suppliers had more than 2 years of actively producing (breeding or subcontracting breeding) animals specifically for support purposes, and, that eighty percent of suppliers advertised using language that tied support animals to adjectives such as "natural," "organic" and "green." This makes the support-animal industry an ally of organic agriculture and other new agricultural interests.

The second publication is "Longitudinal Development of New Agricultural Models" in *Annals of Organic Agriculture* (J4). This used the data from the advertisements, both current and scraped vendor-site data from the Wayback machine, and demonstrated that individuals who are (currently) involved in support-animal production originally derived chiefly from boutique agriculture (e.g. market farms) but over the last two years a growing percentage of entrants have developed out of holistic and naturalistic medicine businesses.

Because this work is primarily economic and small-business oriented, there are fewer funding sources available. I have submitted a National Agricultural Library proposal which is under review.

As part of this work, Dr. Janeway's team has published two conference papers on methods of business-history-analysis using advertising (I am third author on two of these, J10 and J11), and Dr. Kirk has folded some findings into his existing research on family business formation (I am second author on one article (J6) and third on another (J1).)

Due to this research, I have already established that support-animal production can legitimately be considered an industry. This has the potential to interact with the personal angle--the observed hesitation on the part of users of support animals—that is, if support animals are so frequent that they are an industry, then someday recipients may see their provision as a normal part of mental health care.

Also due to this research, I have formed productive research relationships with faculty in Informatics—using online data to analyze socio-cultural and business developments (J3, 4, 6); in psychology (J12) and public affairs (J8 and J10)—interviewing users and non-users of particular psychological interventions. I am always attentive to the context within which a phenomenon such as support animal usage occurs—the very micro-context of individual psychological counseling and decision making, the economic context of business development, and the socio-cultural context of acceptability of non-traditional means of interacting with the natural environment.

Not to be neglected is the fact that many companion animals are often simply cute. The public interest around this phenomenon has led to several media stories (CV M2-5 e.g. "Intrepid Researcher Dares to Examine Support Pigs" *Washington Post*), tweets, and re-tweets--of course, some of the resulting impact has been negative, as this can be a very personal issue for some. I hope that in what I control—my own posts, and interviews—I emphasize a scientific, knowledge-seeking, interdisciplinary approach. A great benefit of this 'pop-culture'

impact is on our undergraduates. So far, I have had five Honors College students do special projects on different aspects of this large and multi-faceted topic (T2-4, 6, 9)

These key publications (J2-4, 7) have garnered over 325 citations as of January, 2021 (source: Google Scholar accessed 1/13/2021). The key publication from my dissertation, which is before my time-in-rank (J22), has achieved over 200 citations on its own, cited by researchers in economics, psychology, and public policy. This gives me confidence that this research stream has sustainable importance within the scientific community.

Looking farther out, will a greater acceptance of support animals allow people to envision an integration of animal life into everyday life? If animal life is integrated into the built environment in this way, will it enhance or displace people's support for natural environments. I have not yet reached into these research questions but they are growing on the scientific horizon.

In my research statement (folder 1 in the Research/e-Dossier), I go into greater detail on methodologies and partnerships; and in Research Goals (folder 5) I provide a roadmap to external funding sources.

### Teaching

My teaching responsibilities have been at both the basic introductory level and the more specialized advanced-student level. Starting in my second year, I have taught ONEL 102 Introduction to Public Policy every fall to a combination of 120 in-person and up to 70 online students, supported by 3 graduate teaching assistants. In spring, my responsibilities have included a rotation of upper level courses: ONEL 332 Public Policy and Business Development, ONEL 412 Psychological Aspects of Public Policy, and ONEL 481/581 AgroBusiness and Public Policy.

I have leaned heavily on colleagues and experts from the Center for Teaching and Learning for design and effective delivery techniques for my large course. I have employed mid-term feedback mechanisms. At the end of each semester, I administer a separate anonymous survey with more questions than is possible in Blue, so as to get even more insight into my students—it's particularly important to distinguish the experiences of majors and non-majors, of online vs. in-person students. It has been a work in progress but by my fourth year I had a solid Honors section developed as a component of ONEL 102. This has been a very rewarding endeavor. I have done and received peer-reviews from O'Neill colleagues Dr. Strangelove and Dr. Picard, especially useful since they also have honors students and research teams. They alerted me to the long-term benefits of identifying promising students who can develop into graduate research and teaching assistants.

Initially I felt that my teaching area of public policy was already sufficiently diverse—public policy inherently touches all people (citizens or not!).—thus by definition it is...should be...inclusive. However, I have recently become aware of the need to employ more critical, rather than descriptive, methods, even in introductory classes where much didactic ground is covered.

### Service

At the school, I have participated in two search committees for faculty and one for an academic advisor. I am a member of the Gateway Community of Practice, and for two years

coordinated the Social Sciences Subcommunity monthly meetings. I have been a member of the School's Speaker Series committee, and personally arranged for four speakers in 2019 and 2020.

I am involved in a broad array of disciplinary service, because my research is engaged in so many different areas. The most important I feel is the narrowest: the newly-developed Ad Hoc Animal Relations Round Table of the American Psychological Committee. This group draws together researchers on support animals, companion animals, and boutique husbandry, and has an affiliate relationship with the Animal Welfare Division of the National Association of Agricultural Research. It is here that my research is most centered, and also where I can make the most distinctive contribution.

I also participate in conferences for the Public Policy Association—2019 session moderator, 2021 poster session judge—and the American Psychological Committee's Alternative Treatment Division—2018 organizing committee; 2019 review committee; 2020 keynote committee. As well, I review manuscripts for seven different journals (listed in CV), and am on the editorial board of *Archives of Animal Welfare*.

### Conclusion

Support animals—dwarf donkeys and the like—may seem like an extremely narrow, ephemeral, niche. I believe that they represent a place where we can interrogate our relationships to nature and to each other.

I am excited at the opportunities that lie ahead at IUPUI. As an urban university, it serves many communities and individuals with sometimes enthusiastic, and sometimes strained, relations with nature. I have already received some external funding for the most traditional of my pursuits, the examination of support animals' psychological benefits (due to federal funding that explores alternative medicine.). I intend to pursue this but also not be deterred from pressing on with projects regarding the public policy and business development angles. Fortunately, because my research topic is enticing to undergraduates, there are opportunities for student-supporting research funding.

I think and work connectedly. As you view my CV and the co-authors listed, you can see that I switch between different teams: I myself am the independent catalyst that shows people how new topics can arise from interdisciplinary dialogue.

In some ways it is more difficult to work collaboratively at IUPUI when it comes to curriculum and teaching, due to the RC economic model---as a economist I must admire its transparency but as a teacher, it stifles some creativity. I do look forward to continually developing my teaching skills so that O'Neill students and others are successful in the paths they pursue.

I believe I have met O'Neill and IUPUI criteria for research excellence with a growing, well-published, well-cited, and interdisciplinary body of work that has excited future researchers and influenced current scholars.

====This person has chosen a 5-page statement with a 2-page area-of-excellence statement.

*This example is certainly not written by anybody who is actually IN O'Neill or who does microeconomics in real life.*