

Guide to Human-Animal Interaction Education

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Pursuing a career in human-animal interaction (HAI) may feel daunting, as this field is quickly growing and changing, and offers a wide array of career possibilities with pathways and educational programs. Yet, it is this broad scope of possibilities that can make navigating the field challenging. The purpose of this article is to help guide individuals who are interested in exploring a career with animals and humans. Our specific aims are to (a) describe and define the current field of HAI, (b) synthesize possible human-animal studies programs as provided by the Animals and Society website, and (c) offer guidance for those interested in exploring HAI careers. This paper, is designed as a practical guide to help students and their mentors navigate the HAI field.

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Interactions between humans and animals have been occurring for tens of thousands of years with the domestication of dogs hypothesized to have begun over 30,000 years ago and cats over 9,000 years ago (Driscoll et. al., 2007; Galibert, Quignon, Hitte, & André, 2011; Wang et al., 2016). Today, as many as 68% of Americans own pets and most consider their pets to be family members (APPA, 2015). One potential explanation for this

enduring attraction to animals is the biophilia hypothesis. The “biophilia hypothesis” (Wilson, 1984) states that humans have an innate attraction and tendency to seek connections to animals and other living things. Perhaps this innate attraction to animals is part of what drives many individuals to seek out professional education and careers centered around animals.

Importance and Rationale

Veterinary medicine is a seemingly obvious career choice for many individuals who know they want to work with animals. Therefore, many students begin their educational journey with pre-veterinary medicine coursework, pursuing undergraduate degrees in fields such as zoology, anatomy and biomedical sciences. As many can attest to, the path to becoming a veterinarian is highly rigorous, requiring many hours of shadowing veterinarians, a 4-year bachelor's degree or equivalent upper division science courses, four years in veterinary school, and often an internship or residency. Yet, even for those students who can handle or even excel in this academic path, veterinary medicine may not be the right path. Many students realize, often after spending copious amounts of time and energy, that they do not, in fact, want to be a veterinarian. Perhaps they do not want to see sick or dying animals or engage in the lifestyle that often accompanies the field. These students know they want a career that involves animals, but are not aware of other options.

Others decide later, often after years in the workforce, that they want to implement some aspect of human-animal interaction (HAI) in their careers. For some, this can translate into years spent in less than satisfying careers because they were not aware of all the options available. For example, some current professionals in animal assisted therapy came to their profession somewhat accidentally after working for several years in the mental health field. It is quite likely that the field of HAI is losing potential talent due to a lack of knowledge about the wide range of career options.

For these people and others, starting down a path towards a career in human-animal interaction may feel daunting. HAI, as a quickly growing and changing field,

offers a wide array of career possibilities with pathways and educational programs. Yet, it is this broad scope of possibilities that can make navigating the field challenging. The purpose of this article is to help guide individuals who are interested in exploring a career with animals and humans. Our specific aims are to (a) describe and define the current field of HAI, (b) synthesize possible human-animal studies programs as provided by the Animals and Society website (<https://www.animalsandsociety.org/human-animal-studies/resources-for-students/>), and (c) offer guidance for those interested in exploring HAI careers. This paper, based on our collective experience and informal queries and discussions with students and professionals in the HAI field today, is designed as a practical guide to help students and their mentors navigate the HAI field.

The Field of Human-Animal Interaction

There are, in fact, many career and educational options for individuals who are interested in animals, including expanding opportunities in innovative university courses, online certificate programs, and undergraduate and graduate degrees. In response to the difficulty of navigating the HAI careers maze, the Animals and Society Institute (ASI) has created a detailed webpage (<https://www.animalsandsociety.org/human-animal-studies/resources-for-students/>) to assist those wishing to enter this field (Animals and Society Institute (ASI), 2017).

The field of HAI has grown exponentially since its inception in the 1960s (Fine, Tedeschi, Elvove, & Fine, 2015). Over the past decades, an increasing interest in the empirical study of HAI has led to a plethora of new published studies

and books (see <http://www.librarything.com/catalog/kenneth-shapiro>). Growing public interest, along with mounting evidence of the benefits of animals to human health and well-being, has motivated academic institutions to design new HAI programs and degrees, and the government to create

a new line of HAI research funding (e.g., National Institute of Child Health and Human Development). These developments, along with the appearance of academic journals (e.g., Human Animal Interaction Bulletin and Animals and Society) and professional societies (e.g., American Psychological Association's

Figure 1. Guide for Human-Animal Interaction Careers. We recommend that anyone interested in the HAI field talk with a career counselor or mentor in the field. Some of the questions or topics that might be useful to discuss either with a career counselor or professionals in the field are listed below.

Human-Animal Interaction Careers

Would you like to make working with animals part of your career?
 Are you unsure **what** your options are or **how** to pursue that career?
 Use this guide to identify your interests, values, & skills that lead to careers & educational opportunities.

Humans, animals, or both?

Every career with animals also involves humans. Do you prefer to work *more directly with humans, animals, or both*?



Animal-assisted therapists work more with **humans**



Veterinarians work with **both**



Wildlife managers work more with **animals**

What topics do you like?

Careers with animals can emerge from *many different topics* such as biology, psychology, or animal science. Additionally, knowledge of law, business, marketing, and more can be valuable skills to this evolving industry.



Psychology



Business



Microbiology

What do you want?

Some careers have *physical, emotional, mental, and moral challenges*. For example, veterinarians work with animals in distress, perform euthanasia, and work long hours. Think about career challenges you may face, and which ones energize you?



Euthanasia



Sick animals



Animal testing

How do you work best?

Certain workplaces are better suited for those who work *independently, co-operatively, creatively, or with structure*. Do you prefer to work inside vs. outside, city vs rural? Take a strengths assessment to determine the best environments for you.



Creativity



Co-operatively



Independently

Human-Animal Interaction Careers (cont.)

Education

Human-animal interaction education is offered *in various levels*. To find different programs visit the [Animals & Society Institute](#) or professional webpages such as [International Society for Applied Ethology Education Page](#).



Certificates



College



Post-Graduate

Careers

There are a variety of career options within human-animal interactions. Every career allows for a different amount of human and animal contact, required education or training, salary, working hours, advantages, and challenges. *Consider your values* in work and life. *Gain experience* in a few areas via internships or part-time work to help you make a satisfying career choice.



Animal Agriculture



Wildlife & Zoos



Animal Welfare



Education or Research



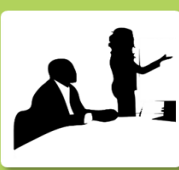
Laboratory Animal



Animal Health



Animal-Assisted Therapy



Administration, Business, Marketing

Want to learn more?

Talk to your career advisor or someone in the human-animal interaction field. Read our paper in the [Human-Animal Interaction Bulletin](#).



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HAI Section, International Society for Anthrozoology), all indicate that HAI has become a legitimate academic field of study and professional preparation.

Defining HAI Prospective HAI students may wonder what is included in the field of HAI and how it is most accurately defined. We agree with the Animals and Society's definition of human animal studies as "a rapidly growing

interdisciplinary field that examines the complex and multidimensional relationships between humans and other animals. Human animal studies comprises work in numerous disciplines -- social sciences (sociology, anthropology, psychology, political science) humanities (history, literary criticism, philosophy, geography), and natural sciences (ethology, veterinary medicine, animal welfare

science, and comparative psychology)”
<https://www.animalsandsociety.org/human-animal-studies/>.

The breadth of this definition can make it challenging for a student interested in HAI to decide which disciplines, degree programs, or courses might be relevant or help guide them in the right direction. The profusion of acronyms and labels (e.g., human-animal interaction, human-animal relationship, human-animal bond, human-animal studies) found in the literature adds to the confusion. Human-animal bond, for example, can be seen as a sub-category of HAI that includes primarily positive relationships with animals, such as household pets. Alternatively, a broader definition of HAI could include any kind of interaction with or relationship to an animal (e.g., a farmer with dairy cows, a horticulturalist and crop-raiding monkeys), which may be less typical of the kinds of human-animal interactions that one typically thinks of as part of the HAI field, but of value nonetheless.

Guide to a Career in Human-Animal Interaction

In an effort to help guide individuals who think they are interested in a career in HAI, we have created a visual guide to help navigate through some of the questions and issues involved in selecting education or career paths in HAI (Figure 1). This guide is not designed to be all encompassing, but instead to be used as a starting point.

What sub-fields within human-animal interaction interest you?

There is a vast array of career options within HAI. A short list includes animal agriculture, laboratory animal technician, wildlife rehabilitation or

conservation, zoos, animal health, animal welfare, animal-assisted therapy, education, research, or even administration and marketing in HAI-related businesses. Every career has differing levels of human and animal contact, required education or training, salary, working hours, advantages, and challenges. We highly recommend that you gain experience in a few areas via internships, volunteering, or part-time work to help guide your career choice.

Do you prefer to work more directly with humans, animals, or both?

Every career with animals involves interacting with humans to some degree. For example, even wildlife or conservation managers working out in the field surveying animals need to be able to communicate conservation practices to the general public. Veterinarians, who interact directly with animals, actually spend much of their time communicating with the animal owners. Animal-assisted therapists incorporate animals into their therapy while also working closely with human clients.

What sort of topics capture your interest?

Careers with animals can stem from many different topics. It is best to identify the subjects that naturally peak your curiosity. For example, veterinarians do well when they have a natural interest in medicine and diseases. Animal-assisted therapists benefit from a solid background and interest in psychology, social work or related fields. Even fields like law, business, and marketing can include aspects of HAI. In other words, finding your interest areas and then exploring how to incorporate animals is a successful path for many.

What values do you hold and what challenges would you like to have?

Each type of career in the field of HAI has its own particular physical, emotional, mental, and moral challenges. For example, veterinarians often work with animals in distress, perform euthanasia, and work long hours. You may be well suited to these challenges. On the other hand, some find this career path to be emotionally fatiguing. It is helpful to be clear about the values you hold in relation to animals. How do you feel about including animals for different purposes such as in research or agriculture or in therapy? Do you believe that animals have certain rights?

What type of workplace would you work best in?

Workplace characteristics vary greatly in HAI careers. For example, many animal trainers may have their own business that requires a large degree of independence and potential financial risks. On the other hand, working as an animal laboratory technician in a research laboratory is often highly structured and works well for individuals who prefer this type of environment. Additionally, it can be useful to think of the physical environment in which you want to work. Do you prefer working indoors or outdoors, city or rural, and deskwork or active work? Choosing a career and workplace that play to your inherent strengths will help set you up for success. We recommend taking a strengths assessment to help you discover and use your strengths. One popular, well researched assessment is the strength finder by Gallup (<https://www.gallupstrengthscenter.com/>).

What level of education do you want or need?

Education in HAI is offered at various levels. The next section will address some of these educational opportunities in more detail. In brief, becoming educated in HAI can take the form of a certificate, associate, bachelors, or post-graduate degree. Additionally, licensed professionals such as counselors or psychologists may include animal assisted interventions as an adjunct to therapy, in which case they would be looking for an add-on specialization to an existing degree. Consider how much education you are willing or able to pursue. In order to find various programs we recommend visiting the Animals and Society Institute website as well as other professional webpages.

Human-Animal Studies Programs

Human-animal studies programs are college or university-level educational offerings with a focus on HAI. In order to provide the most current summary of certificates, programs, and degrees in HAI, we reviewed the Animals and Society Institute website (Animals and Society Institute, 2017). We found this website to provide the most accurate and current listings of human-animal studies programs. Our summary of human-animal studies programs includes both those within the United States as well as international programs. It is important to note, however, that specific human-animal studies programs and classes are not necessary to enter the HAI field. It is just a preferred pathway.

In an attempt to simplify the multitude of program choices currently offered in human-animal studies, we divided the programs into the following

categories: certificate programs, undergraduate minors, baccalaureate programs, and graduate programs (both U.S. and international). Additionally we offer examples of HAI coursework currently offered that does not lead to a degree, minor or certificate. Although the ASI website refers to these programs under the general umbrella of human-animal studies, we found that many different names and titles were used in the various programs (e.g., human animal interactions, anthrozoology), which can contribute to some of the confusion in the field. For the purposes of providing clarification, we have classified them all as human-animal studies programs. All information presented below was collected in March 2017, and it should be noted that the field is changing rapidly, so we advise checking the website and other sources for changes. Additionally, although the ASI website is the most up-to-date resource for human-animal studies programs, we realize this list is constantly in flux as new programs/certificates emerge or change.

Certificate Programs

Twelve certificate programs in human-animal studies are currently offered in the United States through various universities. Of these, three are offered through distance education, four are designated as hybrid (meaning they offer courses that are a combination of online and face-to-face), and five programs do not specify type of delivery method. Of the programs that specify, most of the certificate programs are offered at the graduate level. These programs typically consist of three to five courses that prepare individuals for a specific area in HAI (e.g., animal welfare, overview of the human-animal bond, animals and society). These certificate programs include stand-alone

certificates (e.g., Animal Assisted Therapy) or are associated with a specific degree, such as a Masters of Social Work.

Undergraduate Minors

Ten institutions in the United States currently offer an undergraduate minor in human-animal studies. All appear to be offered face-to-face and are designed as an option within other majors. These undergraduate minors are generally designed to complement a major in a related area and consist of the number of courses required for minors at the specific institution.

Baccalaureate Programs

There are currently seven human-animal studies baccalaureate programs offered, all within the United States. Of these, three are offered face-to-face, and the remaining four are unspecified in their mode of delivery. Some of the bachelor's degree are not specifically labeled Human Animal Studies, but rather include degrees in Animal Behavior, Ecology and Conservation Program. These programs prepare graduates to work in areas such as animal conservation, shelter management or wildlife rehabilitation.

Graduate/International Programs

There has been a notable increase in the last few years in graduate programs, and many of these are international. As of 2017, there are twelve programs within the United States and twelve international programs. It appears that most of these are offered face-to-face. At the doctoral level, there are three Doctor of Philosophy (Ph.D.) programs offered in the United States and two Ph.D. programs offered internationally. The remaining graduate

programs are either at the master's level or consist of individual courses.

Summary of Human Animal Studies Coursework and Disciplines

A review of individual human-animal studies courses illustrate the wide variety of disciplines the HAI field spans. The number of courses offered at each college/university ranges from one individual course to an entire program or concentration consisting of three to five courses. The majority of colleges/universities at the current time, however, offer one or two courses. These courses are housed under many different departments, including social studies, sciences, humanities, theology, and veterinary medicine. Most courses listed on the ASI website do not indicate whether they are undergraduate or graduate. It is assumed, however, that most courses are undergraduate unless they are clearly identified as part of a graduate program. The majority of HAI courses are housed under philosophy, animal science/animal welfare, and anthrozoology. Other disciplines include history, veterinary medicine and sociology. Examples of additional disciplines/departments that offer courses in human-animal studies include psychology, anthropology, American history, religious studies, women's studies, theater arts, and literature.

What Can You Expect From Human-Animal Studies Related Curricula or Courses?

As potential students think about which human-animal studies curriculum plan might best fit their needs, the following questions are suggested as tools to help direct their choices:

- How is this curriculum/class going to challenge your beliefs and understanding about animals, humans, and society?
- How can alternative perspectives impact your critical thinking?
- Is this a standalone course? If so, think about the scope of the material. For example, is it too narrowly focused – perhaps only on clinical applications of HAI, or representing only one person's views? Does it provide an unbiased perspective?
- Is the course shared with other majors/programs and other colleges (cross-listed), which might suggest that it brings in more of an interdisciplinary focus?
- Does the course(s) lead to some kind of certification /licensure or internship experience? For example, is it part of a social work program or counseling program that leads to licensure, or teaches you how to implement animals into your therapeutic work?

Topics that are often included in human-animal studies courses include:

- History of animal domestication and its effects on humans and the domesticates
- History of animals in society
- Philosophical and ethical considerations of animals
- Symbolism of animals in language, art, and religion
- Animal ethology: evolution of behavior, intelligence and emotions
- Working with animals (veterinarians, veterinary technicians, animal caregivers)
- Human attitudes toward animals
- Animals as pets
- Animals as food

- Animals in entertainment
- Research with animals
- Animal cruelty and human violence
- Animal law and animal rights movements
- Animal assisted interventions/therapy

Conclusions

Considering the inherent attraction of humans to animals, it is not surprising that many individuals are interested in incorporating animals into their career. This article was designed to help guide individuals who are interested in exploring a career with animals and humans. The field of HAI is quickly growing, evidenced by the numerous educational opportunities described in this article. It is an exciting time for those interested in HAI; yet, with its incredible breadth and diversity across disciplines, entering the field of HAI can feel overwhelming.

With rare exception, HAI degrees and programs do not stand-alone but rather accompany other course work and degrees, such as zoology, clinical psychology, animal behavior, or anthropology. In seeking to become an HAI professional, it is therefore best to plan your education or find a program that includes a standard academic discipline with either an HAI core or specialized curriculum. Yet, the field is expanding rapidly and new entrepreneurial opportunities are becoming more common. If a job involving HAI is your dream, we encourage you to look not only at careers in which HAI can play a role, but also at new entrepreneurial career opportunities (e.g., animal-focused journalist, hospice care for pets, professional consultant for facilities that want to offer animals in health care settings, animal assisted therapy program assessment professionals, etc.).

Limitations

This article has some limitations. First, since the field of human-animal interaction is expanding so quickly, the actual numbers of educational programs listed here will quickly become outdated. Additionally, since we relied on the Animals and Society website for much of our information, given the dynamic nature of the field, it likely does not reflect every opportunity. With these caveats in mind, this article provides a general overview of the HAI educational opportunities as of 2017. Second, please note that the perspectives in this paper are influenced by our personal experiences. At the time of writing, the authors collectively have direct experience in the fields of animal health, mental health, laboratory animal careers, animal welfare, animal-assisted interventions, wildlife conservation, research, and education.

Future Directions

There are several areas related to human-animal education and careers that are ripe for future research and development. First, there is a need to better define what lies within the scope of HAI. What types of relationships to or interactions with animals are at the center of interest for HAI professionals? Bringing better definition and clarity to the field can also help insure that HAI students are exposed to a common core of knowledge, principles, and skills that we believe is vital to all HAI careers. Regardless of the specific path that HAI students might pursue, we believe that all programs should include a minimum core curriculum that covers animal welfare and human-animal relationships. Second, there is a need for increased guidance for students and professionals interested in human-animal

interaction. Although this paper may serve as a good starting place, students would benefit from a consolidated, searchable database of careers and programs. Third, many aspects of HAI could benefit from professionalization. For example, the demand for animal assisted therapy is high (e.g., in hospital and other care facilities). Degree and certification programs in these areas might help turn these services, which currently are often on a voluntary basis, into lucrative careers.

We hope that students, professionals, career counselors, academic

advisors, and the HAI community find this article useful in identifying HAI educational opportunities. This article has elucidated just some of the HAI options currently available, and we envision readers using this as a starting point in their quest for an HAI-related career. The field of HAI is constantly changing and growing with new exciting opportunities unfolding constantly. We suggest making use of the Animals and Society Institute website, as well as other resources, to help guide educational and career HAI efforts.

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