Academia:  
Clinical Practice

Background

Academia is an attractive option for pharmacists who enjoy working with students while engaging in clinical practice and/or in clinical research. With the increase in the diversity of academic positions, it can no longer be said that an academician’s career is confined to the laboratory or classroom. Three distinct profiles are included in this series: Clinical Practice, Economic, Social, and Administrative Sciences, and Pharmaceutical Sciences. Each profile provides information on the similarities and differences in these three academic careers.

Clinical practice academicians often work with other health care professionals in a consultative capacity to select medication and develop therapeutic regimens for patients. In addition, many are involved with medication therapy management programs and services. Therefore, academicians have both a direct and an indirect impact on patient care.

The “Academia” category may be loosely defined as belonging to a university faculty, usually that of a college of pharmacy. However, clinical practice pharmacists may also hold academic positions in medical, veterinary, and other health care–related educational institutions. Positions may range from the dean of a college of pharmacy to a teaching clinical pharmacy position at an off-campus site or to a classroom setting.

Duties of an academic pharmacist may include administrative activities, scientific research, teaching professional student pharmacists, supervising research and teaching graduate students, speaking and/or publishing in scientific venues, student advising, and teaching student pharmacists through experiential practice sites.

In the 2012-2013 academic year, there were a total of 6,040 full-time pharmacy faculty at the nation’s colleges and schools of pharmacy. (Source: http://www.aacp.org/about/Pages/Vitalstats.aspxAccessed June 2013.)

One respondent from Missouri noted, “I am working toward a profession-wide goal that I believe is worthwhile and necessary.”

Characteristics

Two hundred thirteen respondents to the 2012 APhA Career Pathway Evaluation Program survey identified themselves as practicing in this area. Ninety-three percent of the respondents had a PharmD degree with 55% of them being earned as an entry level degree. This is a change from the 2007 survey results where a majority of the respondents had earned their PharmD post BS. Sixty-eight percent of respondents had a residency with 11% having a fellowship. Twenty-nine percent reported an advanced degree (MA, MS, MBA, PhD, other); this is up from 17% in 2007. An additional 40% indicated certificate training of some kind and 40% also reported having earned a Board of Pharmacy Specialties Certification.
Respondents’ average age was 42 years old. Two thirds (67%) of respondents were female. Income data show that nearly half (48%) earn less than $100,000 (includes respondents who held a residency for half of the year and consisted of 8% of respondents), while 50% earn $100,000 or more per year. The average time worked per week was 47.8 hours.

A majority of respondents indicated that they were satisfied with their job, with 51% indicating “extremely satisfied” and 42% indicating “somewhat satisfied.” On a similar scale, respondents said that they felt the job was challenging, with 45% indicating “extremely challenging” and 51% indicating “somewhat challenging.”

**Insider’s Perspective**

**What aspects of the job are most appealing?**
Reflecting the different type of activities involved in academia, 35% of respondents said the most appealing aspect of their work was its “flexibility” or “variety.” Many respondents said that working with students and patients was most appealing.

**What aspects of the job are least appealing?**
Working within a large organization like a university necessarily involves a considerable administrative load. Wearing “five hats at once,” reported by one respondent, makes “work life balance difficult.” Several respondents noted that the politics of academia can make the job frustrating at times.

**What advice should students and practitioners consider when selecting the option of Academia?**
Several respondents cautioned that you should make sure to have clear expectations at the outset of this career. Since time is split between both teaching and practice, it needs to be clear to the employee and the employer(s) (often both the university and a clinical setting) how much time should be spent on each activity.

Many also advised that gaining clinical practice experience is highly valuable before pursuing a career in academia.
Critical Factor Ratings

Interaction With Patients
Interaction with patients and the public was identified in the middle range, at 5.6. However, there is significant variance because some respondents probably are clinical faculty dealing with student pharmacists in a clinical setting while others are more research oriented and less likely for such encounters. Eighteen percent of all respondents’ time is spent in patient care services, which includes those who have zero time with patients. Of those who have at least some direct patient care, overall 31% of their time is spent with patients.

Conducting Physical Assessments
Relatively little academics’ time is spent in conducting physical assessments. Given the need for multitasking numerous activities, this is likely a reflection of the specific job responsibilities of academic pharmacy clinical practice overall.

Interpreting Laboratory Values
Clinical practice in an academic center tends to provide the opportunity for access to patient charts and laboratory values. Even with this accessibility, respondents were mid-range in the use of laboratory values. This is likely a reflection that some faculty are working outside of an academic medical center in clinics and community pharmacies where access to clinical data is often limited.

Continuity of Relationships
Academic pharmacists responded with a mid-range 6.0 ranking of the continuity with “patients or consumers,” indicating that many are not involved in a long-term or continuing relationship with patients. This may illustrate the focus of the respondents with pharmacy or graduate students, as well as the greater involvement with hospitalized, short-term care patients. Some long-term relationships can develop where the practice site is involved with outpatient clinics. This 2012 result is higher than the 2007 result of 5.2 reflecting that more faculty are working in outpatient clinics and community pharmacies.
Helping People
“Direct” versus “indirect” help is the crux of this question and, at a 5.9 rating, academic clinical practice pharmacists are in the mid-range. The clinical academic pharmacist helps individual people directly slightly more than indirectly.

Collaboration with Other Professionals
Collaboration with other professionals ranked higher with a 6.4 rating, indicating that academic pharmacists collaborate frequently with non-pharmacist professionals. Again, this could be in conjunction with a clinic-based practice or with a research activity, in either case, with health care professionals or with research-based academicians.

Educating Other Professionals
To a substantial degree, academicians spend their time involved with educating other professionals. This is not surprising, since many are involved in university, hospital-based, and/or ambulatory care interdisciplinary educational efforts involving patient care and/or research endeavors.

Variety of Daily Activities
One of the higher ratings (7.8) reflects the academic pharmacists’ role as a varied one. One respondent enjoyed the “variation, challenges of teaching, research, clinical practice, and supervising multiple people.” Responsibilities include both staff and administrative functions.
Multiple Task Handling
Another higher rating at 8.1, multitasking is a nearly universal aspect of these positions. While “teaching student pharmacists” might seem to be the common denominator in academia, a myriad of other activities lead to the previously mentioned variety and need for the academic clinical practice pharmacist to juggle several functions simultaneously.

Problem Solving
The response on this question indicates the need for the academic pharmacist to seek out new solutions for new problems versus being able to rely on previously useful solutions.

Focus of Expertise
Perhaps somewhat surprisingly, academic clinical practice pharmacists responding to this survey indicate only a slight tendency toward having sharply defined areas of expertise versus a broader area of expertise. Many faculty members are asked to teach in a wide variety of subject matter, especially at smaller institutions.

Innovative Thinking
A relatively high rating of 7.6 in this area suggests that academic clinical practice pharmacists encounter a somewhat higher need for innovative solutions and thinking about pharmacy issues, leading to new ideas in general pharmacy practice, as well as in the academic setting.

Applying Scientific Knowledge
Not surprisingly, clinical practice academicians rely heavily on the application of scientific knowledge in their practice activities whether in teaching, research, or providing expertise for patient care.
Applying Medical Knowledge
Relative to the application of scientific knowledge, academic clinicians apply slightly more medical knowledge in their practice. This is likely related to the collaborations they have with physicians, medical students, and other health care professionals in the clinical and academic setting.

= 8.0

Creating New Knowledge by Conducting Research
The slightly lower than mid-range ranking of 4.4 for creating new knowledge by conducting research is somewhat surprising. One might expect a higher ranking for research as an integral component of academic practice; however, many clinical practice faculty have clinic responsibilities that may or may not include a research component. Eight percent of respondents’ time is spent on research activities (down from 11% in 2007; may reflect an increased emphasis on direct patient care over research).

= 4.4

Management/Supervision of Others
A mid-range response indicates that some time is devoted by clinical practice academicians to management and supervisory responsibilities of others. Those in management roles, deans, and department heads are at the higher end of the range while others have a lesser level of such duties.

= 5.0

Management/Supervision of a Business
Many of the respondents indicated that they spend no time managing a business. A few who are in administrative roles rated this factor higher. Only 5% of respondents’ time is spent on business-related activities.

= 3.4
Pressure/Stress
An upper mid-range rating of 6.9 indicates that academics have a slight tendency toward experiencing stress or pressure in their work. Some stress is associated with publishing articles in professional journals and obtaining funding for research. Balancing time across multiple responsibilities adds to this factor.

= 6.9

1 2 3 4 5 6 7 8 9 10
Never experience pressure/stress
Always experience pressure/stress

Work Schedule
Clinical practice academics responding to this survey are around the mid-point of the range of unpredictable versus predictable work scheduling. This reflects the variability of responsibilities throughout the year and the effect of multiple responsibilities including teaching, clinical practice, research, and committee and other administrative work characteristic of an academic institution.

= 6.2

1 2 3 4 5 6 7 8 9 10
Irregular/unpredictable
Regular/predictable

Part-Time Opportunities
Academic settings infrequently offer part-time work opportunities. However, this does vary by institution and the type of academic position.

= 3.3

1 2 3 4 5 6 7 8 9 10
No opportunity for part-time employment
Always opportunities for part-time employment

Job-Sharing Opportunities
Job sharing is not a common practice in academic institutions, which is reinforced by the low ranking of this factor.

= 2.6

1 2 3 4 5 6 7 8 9 10
No opportunity for job-sharing
Always opportunities for job-sharing

Exit/Re-entry Opportunities
Exit/re-entry opportunities rank low to mid-range within the academic clinical practice area.

= 4.5

1 2 3 4 5 6 7 8 9 10
No opportunity for exit/re-entry
Always opportunities for exit/re-entry
Parental Leave Opportunities
Parental leave opportunities ranked high in the areas of work-related options. Most institutions provide the opportunity for parental leave. 

= 7.8

Leisure/Family Time
Clinical practice respondents reported varying experiences regarding time for leisure and family activities. Some said they have adequate time for these activities, while others claimed to have very little. Some commented on the somewhat difficulty of finding work-life balance. 

= 6.8

Job Security
Academic pharmacists enjoy a high level of job security, ranking highly at 7.6. Employment contracts, tenure, and academic year appointments contribute to this stability. 

= 7.6

Opportunities for Advancement
To a relatively high degree, academicians enjoy opportunity for advancement in their practice situations. Universities and hospitals are large organizations with constantly changing and widely varying personnel needs, leading to openings and promotion opportunities both within the pharmacy areas and beyond. There is a hierarchy within academia that includes the following positions: lecturers, clinical instructors, post-doctoral fellows, assistant professors, associate professors, full professors, assistant deans, associate deans, and deans. In addition, newer positions appoint directors of specific business/academic units within an institution, such as director of alumni relations. 

= 7.2
Opportunities for Leadership Development
The 7.8 response indicates that academic clinical practice pharmacists have ample opportunities to develop their leadership potential. Such opportunities could be within the college of pharmacy itself, within the greater university setting, nationally within the specialty field (e.g., infectious disease), or within professional associations (e.g., APhA).

Community Prestige
Clinical practice academicians, generally as employees of a university, are perceived as prestigious members of the community. Over many years of a national public opinion poll, pharmacists in general have been highly respected by the public, therefore it is not surprising that pharmacists employed by a prestigious institution, such as a college or university, would be even more highly respected. Indeed, universities are often looked to for role models.

Professional Involvement
The highest ranking by the 213 participants in this survey is their high level of opportunity to participate in professional association meetings and similar events within the profession of pharmacy. Accordingly, it is not unusual to see an academically based pharmacist in a leadership position in a state or national professional association. Some universities provide faculty members incentives for such “community” service involvement.

Income
Respondents fell slightly above the mid-range of being properly versus not properly compensated for their professional services. It is not uncommon, however, for faculty members to be expected, even encouraged, to seek additional outside sources of income (e.g., through consulting projects) that would supplement their faculty salary.
**Benefits (vacation, health, retirement)**

This ranking moves toward the upper end of the scale, indicating a higher level of benefits in the form of vacation time, health insurance, and retirement packages. This is not surprising, because faculty members are typically employees of large institutions, which normally offer such benefits to all their employees. As observed in the comments in the above factor regarding income, ample summer and holiday vacation periods are also opportunities for outside work or projects.

![Benefit Package Scale](image)

= 8.9

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<tr>
<td>No benefit package</td>
<td>Excellent benefit package</td>
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**Geographic Location**

With a moderate ranking on this factor, academic pharmacists have a generalized opportunity to practice many places in the country among the nation’s 120+ colleges and schools of pharmacy. Indeed, nearly all states have at least one college of pharmacy, and those that do not are geographically close to another state’s colleges. Also, many colleges have “outreach” or similar programs in which faculty members are placed or “shared” with off-campus hospitals, clinics, and other sites. Another recent trend has been to have satellite campuses across a state.

![Geographic Location Scale](image)

= 6.3

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<tbody>
<tr>
<td>Limited to one location</td>
<td>Can practice anywhere</td>
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**Working Remotely**

A moderate score of 4.9 reflects that working remotely is an option for some activities but not likely possible for 100% of the job. Some requirements such as grading papers or conducting literature research could be done from a home office. Faculty are typically expected to have office hours and lecture for teaching requirements.

![Working Remotely Scale](image)

= 4.9

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<tbody>
<tr>
<td>Never can work remotely</td>
<td>Always can work remotely</td>
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**Autonomy**

A high ranking of 8.1 indicates that faculty members are trusted professionals with a high level of independence and decision making. The underpinning of this autonomy, however, is a high sense of responsibility, self-discipline, and initiative. A number of respondents listed autonomy as one of the most appealing aspects of their practice.

![Autonomy Scale](image)

= 8.1

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<tr>
<td>No autonomy</td>
<td>Total autonomy</td>
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Self-Worth
One of the higher rankings by clinical practice academicians is for opportunities that create self-worth. An academic pharmacist is doubly interested in creating positive outcomes, both as a pharmacist and as a teacher of student pharmacists. College and university settings encourage the advancement of personal value and the full development of the potential of student and teacher alike.

Future Focus
Not surprisingly, academicians are highly focused on the future of the profession and health care. Activities such as teaching and research are concerned with advancing knowledge and understanding the latest scientific information; and teachers learn themselves from the piercing questions of students.

Professional Prestige
This area receives a high rating (8.2) among respondents, indicating a high level of prestigious exposure within the pharmacy profession. Former students, as well as other pharmacists, appropriately hold faculty in high esteem.

Unique Practice Environment
Clinical practice respondents indicated a relatively high level of uniqueness in their practice settings. A clinical pharmacist might be in a fairly typical hospital or ambulatory setting or in a unique advanced care practice setting.

Advanced Degree
There is significant variation whether graduate degrees and other educational training/experiences are required, depending on various positions within academia. Twenty-nine percent of those responding to the survey have such degrees.
Entrepreneurial Opportunity
Not surprisingly, faculty members indicate a lower level of entrepreneurial opportunity in their practice settings. A separate consulting activity might present such an opportunity.

= 4.0

Additional Training
Additional training beyond the highest degree held is a requirement in many academic settings. The demographics of this group is indicative, with 68% having completed a residency and 40% holding a Board of Pharmacy Specialties certification – which is not additional training but a demonstration of high clinical aptitude.

= 7.9

Interacting With Colleagues
Clinical practice academicians tend to interact with coworkers on a regular basis through committee work and group teaching. However, time in the clinic and research may be done alone or with a colleague.

= 8.4

Travel
Respondents for the most part have lower needs to travel for their day-to-day activities. However, attending state, national, or international meetings does provide some travel opportunities.

= 3.5

Writing
Respondents were in the mid-range regarding writing. Some respondents focused on the preparation of publications while others focused on specific project reports that were required for their position.

= 4.7
Working With Teams
Clinical practice academicians tend to have more team-related assignments because they often team teach clinical courses.

Mean Scores for Critical Factors

<table>
<thead>
<tr>
<th>Critical Factor</th>
<th>Mean Score</th>
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<tbody>
<tr>
<td>1. Interaction with people</td>
<td>5.6</td>
</tr>
<tr>
<td>2. Performing physical assessments</td>
<td>2.8</td>
</tr>
<tr>
<td>3. Interpreting laboratory values</td>
<td>4.3</td>
</tr>
<tr>
<td>4. Continuity of relationships</td>
<td>6.0</td>
</tr>
<tr>
<td>5. Extent to which effect is direct</td>
<td>5.9</td>
</tr>
<tr>
<td>6. Collaboration with other professionals</td>
<td>6.4</td>
</tr>
<tr>
<td>7. Educating other professionals</td>
<td>5.9</td>
</tr>
<tr>
<td>8. Variety of daily activities</td>
<td>7.8</td>
</tr>
<tr>
<td>9. Multiple task handling</td>
<td>8.1</td>
</tr>
<tr>
<td>10. Problem solving</td>
<td>6.4</td>
</tr>
<tr>
<td>11. Focus of expertise</td>
<td>5.8</td>
</tr>
<tr>
<td>12. Innovative thinking</td>
<td>7.6</td>
</tr>
<tr>
<td>13. Applying scientific knowledge</td>
<td>6.4</td>
</tr>
<tr>
<td>14. Applying clinical knowledge</td>
<td>8.0</td>
</tr>
<tr>
<td>15. Creating new knowledge by conducting research</td>
<td>4.4</td>
</tr>
<tr>
<td>16. Managing others</td>
<td>5.0</td>
</tr>
<tr>
<td>17. Managing business operations</td>
<td>3.4</td>
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<tr>
<td>18. Pressure/Stress</td>
<td>6.9</td>
</tr>
<tr>
<td>19. Work schedule predictable</td>
<td>6.2</td>
</tr>
<tr>
<td>20. Part time opportunities</td>
<td>3.3</td>
</tr>
<tr>
<td>21. Job sharing</td>
<td>2.6</td>
</tr>
<tr>
<td>22. Exit and re-entry</td>
<td>4.5</td>
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<td>23. Parental leave</td>
<td>7.8</td>
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<tr>
<td>24. Free time for leisure/family activities</td>
<td>6.8</td>
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<tr>
<td>25. Job security</td>
<td>7.6</td>
</tr>
<tr>
<td>26. Opportunities for advancement</td>
<td>7.2</td>
</tr>
<tr>
<td>27. Opportunities for leadership development</td>
<td>7.8</td>
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<tr>
<td>28. Community prestige</td>
<td>7.5</td>
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<tr>
<td>29. Professional involvement</td>
<td>9.0</td>
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<tr>
<td>30. Income</td>
<td>6.4</td>
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<tr>
<td>31. Benefits (vacation, health, retirement)</td>
<td>8.9</td>
</tr>
<tr>
<td>32. Geographic location</td>
<td>6.3</td>
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<tr>
<td>33. Working Remotely</td>
<td>4.9</td>
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<tr>
<td>34. Autonomy</td>
<td>8.1</td>
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<tr>
<td>35. Self-Worth</td>
<td>8.4</td>
</tr>
<tr>
<td>36. Future focus</td>
<td>7.5</td>
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<tr>
<td>37. Professional prestige</td>
<td>8.2</td>
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<tr>
<td>38. Unique practice environment</td>
<td>7.0</td>
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<tr>
<td>39. Advanced degree</td>
<td>5.8</td>
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<tr>
<td>40. Entrepreneurial opportunity</td>
<td>4.0</td>
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<tr>
<td>41. Additional training</td>
<td>7.9</td>
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<tr>
<td>42. Interacting with co-workers</td>
<td>8.4</td>
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<tr>
<td>43. Travel</td>
<td>3.5</td>
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<tr>
<td>44. Writing</td>
<td>4.7</td>
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<tr>
<td>45. Working with teams</td>
<td>6.8</td>
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</tbody>
</table>
References


Professional Organizations
Accreditation Council for Pharmacy Education (ACPE)
135. S. LaSalle Street, Suite 4100 Chicago, IL 60603
Tel: 312-664-3575  Fax: 312-664-4652
[www.acpe-accredit.org](http://www.acpe-accredit.org)

American Association of Colleges of Pharmacy (AACP)
1727 King Street Alexandria, VA 22314
Tel: 703-739-2330  Fax: 703-836-8982
[www.aacp.org](http://www.aacp.org)

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13000 W. 87th Street Parkway
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[www.accp.com](http://www.accp.com)

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[www.ashp.org](http://www.ashp.org)

Board of Pharmacy Specialties
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Tel: 202-429-7591  Fax: 202-429-6304
[www.bpsweb.org](http://www.bpsweb.org)