



# UNIVERSITY OF MARYLAND

SCHOOL OF PUBLIC POLICY

To: Charles Caramello, Dean of the Graduate School  
From: The Graduate Council Working Group on the PhD and the Professional Doctorate  
Hugh Bruck, Mechanical Engineering  
Kalyani Chadha, Journalism  
Alex Chen, Urban Studies and Planning  
Charles Delwiche, Cell Biology and Molecular Genetics  
Lenisa Joseph, Special Education  
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Date: 14 May 2014  
Re: The Professional Doctorate at the University of Maryland, College Park

The National Center for Education Statistics, Institute of Education Sciences, United States Department of Education, maintains a glossary. Here many terms commonly understood, and often misunderstood, are given formal definitions. Among them are these three:

## **Master's degree**

An award that requires the successful completion of a program of study of at least the full-time equivalent of 1 but not more than 2 academic years of work beyond the Bachelor's degree. Some of these degrees, such as those in Theology (M.Div., M.H.L./Rav.) that were formerly classified as "first-professional," may require more than two full-time equivalent academic years of work.

## **Doctor's degree-research/scholarship**

A Ph.D. or other doctor's degree that requires advanced work beyond the Master's level, including the preparation and defense of a dissertation based on original research, or the planning and execution of an original project demonstrating substantial artistic or scholarly achievement. Some examples of this type of degree may include Ed.D., D.M.A., D.B.A., D.Sc., D.A., or D.M., and others, as designated by the awarding institution.

## **Doctor's degree-professional practice**

A doctor's degree that is conferred upon completion of a program

providing the knowledge and skills for the recognition, credential, or license required for professional practice. The degree is awarded after a period of study such that the total time to the degree, including both pre-professional and professional preparation, equals at least six full-time equivalent academic years. Some of these degrees were formerly classified as first-professional and may include: Chiropractic (D.C. or D.C.M.); Dentistry (D.D.S. or D.M.D.); Law (J.D.); Medicine (M.D.); Optometry (O.D.); Osteopathic Medicine (D.O.); Pharmacy (Pharm.D.); Podiatry (D.P.M., Pod.D., D.P.); or, Veterinary Medicine (D.V.M.), and others, as designated by the awarding institution.

Overlap and ambiguity are apparent. Some Master's degrees are professional, or at least they were "first-professional" until the 2010-11 academic year, when that term was discontinued. Research doctorates include both the PhD and other degrees, among which latter are several more often considered professional doctorates. And professional doctorates, some of whom were recently called "first-professional" degrees, are awarded mostly in clinical fields, but ones differing greatly in requirements, principles, and methods. Finally, both species of doctorate are awarded in other unlisted fields "as designated by the awarding institution."

The term of central interest in this report is "professional doctorate." What does this term really mean generically, and what does it mean here, on our campus?

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Professional doctorates are awarded on completion of academic programs designed for one, or more, of five reasons:

- 1) to meet the expectations of professions to be joined;
- 2) to advance recipients in professions already joined;
- 3) to advance professions themselves;
- 4) to serve societal and industrial sectors finding Bachelor's, Master's, and PhD graduates mismatched to complex practical problems; and
- 5) to attract students and benefactors otherwise uninterested in graduate education.

A research university, such as ours, may find among these reasons sharp differences in appeal.

Professions differ. So do their doctorates. And so have the occupations that have *become* professions by elaborating doctorates, often to gain a legal right to remunerative practice unsupervised by a traditionally "sovereign" profession. The professional doctorate eludes definition, but it does yield to description. It stresses the mastery of practical abilities, requires such mastery to be demonstrated, and does not require —

however vigorously it may encourage — that mastery *itself* be enhanced by independent contributions to new knowledge.

The oldest professional doctorates long predate the doctor-of-philosophy (PhD) degree. Some professional doctorates explicitly require or encourage research, even basic-science research; all expect familiarity with or mastery of a research literature. Professional doctorates are named for their fields and vary not only in content but also in process. PhDs, rather, are earned in specific fields but not named for them, nor do they differ much in their process; the very same degree is awarded in standard fashion for presumptively comparable effort in entirely dissimilar fields.

Such distinctions mean less in some settings than in others. In recent years among a range of public institutions these distinctions have become defining features in intellectual-jurisdictional battles between competing state systems (University of California and California State), among system partners (in Michigan and in Wisconsin), and between a main campus and its satellite campuses (CUNY). Themes arising from such clashes have included “ownership” of the research doctorate, impropriety of advanced scholarly ambitions held at institutions fated to instruction only, and threats to “flagship” navigation. Settlements have tended to concede space to professional doctorate programs within negotiated boundaries.

Last October, the University of Maryland’s Office of Institutional Research, Planning, and Assessment categorized and enumerated by type those doctoral degrees awarded from July 2012 through June 2013 and those awarded over the previous 13 years (SEE ATTACHED). Since the year 2000, “doctoral – research scholar” degrees awarded had increased from 461 to 683. Since 2001, “doctoral – professional practice” degrees awarded had fluctuated around 30 per year; 5 of last year’s 30 were in Audiology, the remaining 25 in Veterinary Medicine, a program run jointly off campus with Virginia Tech. Professional doctorates in Education (4) and Musical Arts (19) were, unexpectedly, listed with PhDs but then sliced out from a pie chart, reducing the PhD count from 683 to 660. This “UMD Doctoral Degree Summary” showed, first, that professional doctorates had persisted in our university but remained isolated and rare; second, that they were hard to summarize, fitting no established pattern and meeting widely differing needs; and, three, that Veterinary Medicine, of whose existence many members of the graduate faculty may yet be unaware, was the biggest.

What this summary did *not* show was what soon prompted formation of the Working Group, that proposals to create professional doctorates were expected to increase in number, differ in design, and vary in funding.

A recent request from the College of Education seeking to restructure the EdD’s dissertation committee was taken as early evidence of this anticipated trend. Maryland has awarded the EdD since 1957, but the requested innovation — to accept more holders of the EdD as examiners for the EdD — was new, even startling. The funding, supplied

substantially by school systems requesting professional-doctorate education for their own administrators, was certainly entrepreneurial but not new. The Council's concerns were almost wholly allayed by further discussion between the Working Group and the College of Education. One residual worry was whether EdD-holding examiners working in the funding school system could be fully objective in their judgments. However, as conflicts of interest are not unknown in the composition of examining committees generally, the potential here seemed likely to prove manageable.

Broader questions about the professional doctorate at our institution remained, however. These questions we compiled in seven sets.

***1. By encouraging new professional-doctorate programs, could the University do anything well that it cannot now do well?***

Professional-doctorate programs are adaptive in design and, as such, require individualized scrutiny. Their products are distinctive.

The College Park campus is home to many units that might consider establishing professional doctorates. Those that have done so already number only four: Agriculture & Natural Resources (the DVM with Virginia Tech), Behavioral and Social Sciences (Audiology's AuD), Education (the EdD), and Arts & Humanities (Music's DMA). These programs all answered needs unique to their units. No other units, even those now accustomed to graduating PhDs seeking employment in industry rather than the academy, have formally proposed the creation of parallel professional doctorates or the "professionalization" of existing PhD programs.

Several units, though, have been considering professional-doctorate proposals. Putative advantages are expected to range across the five reasons cited above. One unit is considering several professional-doctorate proposals expected to emphasize the first three reasons. Another unit is expected to emphasize the fourth and fifth reasons in proposing that a professional doctorate would be awarded for work performed mostly in, and funded securely by, a foreign country and entirely in the language of that country; the topic would be technical, not linguistic or cultural, and the terminal scholarly product would be translated into, but not defended in, English. Prompted by a potential benefactor, a third unit, one with an existing PhD program, has been exploring the advisability of proposing a professional doctorate in a licensed nonprofessional field; the reasons expected to be emphasized would be the third as well as the fourth and fifth. In these last two cases, innovations in admissions and oversight, including alterations in dissertation-committee composition, would likely be requested.

The University itself could be a proposal's prime mover. An emerging field in which interest has been strong, fundable, and transdisciplinary could be the centerpiece of a compelling line of study among whose outcomes could be a professional doctorate. Cybersecurity might be an example.

***2. Professional doctorates and PhDs coexist now, formally, on our campus, but do they also coexist informally in units whose doctoral-research projects vary in focus from the highly theoretical to the strictly applied? If so, should this variance be seen as showing the adaptability of the PhD degree or as showing cause to spin-off applied work to a professional-doctorate track?***

We have encountered no urge to dichotomize any existing PhD program along two tracks, pure and applied. Tensions within programs are apparent, but in no unit do those tensions seem unmanageable by directors of graduate studies. Other tensions, which might be expected, are not in evidence. For example, the Department of Psychology has five graduate specialty areas: Clinical; Cognitive and Neural Systems (CNS); Counseling; Developmental; and Social, Decision, and Organizational Science (SDOS). Each area's doctoral program leads to the PhD, even though Clinical Psychology and Counseling are applied professional fields subject to certification and state licensure. Some institutions offer a PsyD in Clinical Psychology rather than the PhD. For example, Indiana State University offers only the PsyD, stressing its heavier emphasis on clinical training and defending at length its non-inferiority as a professional qualification — even, in “several” graduates' careers, as an academic qualification.

***3. Do we have any basis upon which to predict the effect a proliferation of professional doctorates would have on the PhD degree? In departments with both degrees already? In departments with the PhD but not the professional doctorate (and no intention to offer one)? Would each degree become less like each other? Or might they tend to converge?***

Were professional doctorates to proliferate among units with existing (and persisting) doctoral programs, then PhD committees would likely expect dissertation research more consistently to generate new knowledge, and professional-doctorate committees would likely expect dissertation research to incorporate, or even somehow to be replaced by, projects or practica or patents. Which is to predict that doctorates, once separated into distinct populations, would speciate. We may have seen evidence of such evolution in the factors, ones internal to the College of Education, that led recently to a request to change the composition of EdD examining committees.

Were professional doctorates to proliferate among units with no existing (or no persisting) PhD programs, then unit-to-unit differences between doctoral programs might narrow, with convergence being the trend. The less prevalent program on our campus, the professional doctorate, might come more closely to emulate “the campus standard,” the PhD, than originally foreseen. We certainly have seen such evolution in Public Policy, a transdisciplinary field in which dissertations often employ single-discipline methods.

The Graduate School could, of course, monitor such changes and, if thought disadvantageous, moderate them.

**4. *Should professional doctorates and PhDs be funded differently? Should any unit's professional-doctorate proposal be entertained without plausible external funding plans?***

Professional doctorates are more often funded by savings and debt than by fellowships, grants, and contracts, but they may in some instances be funded in whole or in part by corporations or governments. Our EdD's funding, for its current cohort, comes partly out-of-pocket from students and partly from their employer, the Prince George's County School System. If professional-doctorate programs bring with them money for which PhD programs are not competing, the University's interest may be aroused, *ceteris paribus*. On the other hand, reliance on novel non-rival funding could result in professional doctorates that varied too markedly in enrollment to prove sustainable.

**5. *Since professional-doctorate programs classically aim to meet standards set by specific professions, should any unit's professional-doctorate proposal be entertained in a field WITHOUT robust professional standardization? Or, in contrast, but in keeping with the University's public-service role, should professional-doctorate proposals be encouraged FIRST in fields long overdue for standardization? (Note in this second regard how the Carnegie Foundation's so-called Flexner Report, "Medical Education in the United States and Canada," 1910, led to the SETTING of professional standards in the US, not to the meeting of standards already existing here.)***

The University of Maryland, Baltimore (UMB) — legitimately self-styled now as "The Founding Campus" — is dominated by students pursuing and faculty holding professional doctorates: DDS, DNP, DPH, JD, MD, PharmD. Even UMB's Bachelor's, Master's, and PhD degrees are being earned in professional schools. Here in College Park, at "The Flagship Campus," the professional doctorate has been, both comparatively and absolutely, a rarity. Any newly proposed professional doctorate would have to meet a need unmeetable by existing Master's and PhD programs.

Proposals for new professional doctorates in College Park should not be expected to arise in fields with robust professional standardization — either because those fields are already well served elsewhere in our state or because their terminal degrees are Master's or PhDs. That said, we might yet choose to encourage proposals for new professional doctorates either in pursuit of our public mission or in response to perceived opportunities. Either way, we would find ourselves not simply meeting standards but helping to set them.

**6. *Should research and originality be required, encouraged, allowed, or avoided in***

***professional doctorates? Should professional doctorates adhere to — or shun — an apprentice model? Should professional doctorates follow a set schedule? Should professional-doctorate training be on-campus for some standard period? Should professional doctorates and PhDs differ in formal markers of progress: courses completed, examinations passed, proposal defended, advancement to candidacy earned, dissertation defended?***

The asking and answering of a well framed research question should be expected in all professional-doctorate programs requiring a dissertation, but not all professional doctorates do require a dissertation. Yet the asking and answering of a well framed research question might be required nonetheless. Our own Doctor of Audiology (AuD) degree might serve as a model. The AuD abandoned its dissertation requirement in 2009, substituting a 4-hour doctoral capstone research project. The AuD can be earned “on the way” to a PhD, which latter degree can also be earned separately. The AuD prepares students to join a clinical profession; the PhD alone does not; the AuD/PhD prepares a clinical audiologist to conduct independent research. (UMB, by the way, employs audiologists but does not train its own, but it does help train ours, clinically.) Audiology, of course, is a field *with* robust professional standardization; comprehensive examinations and a capstone research project are required by the *field*. The place of research in fields *without* robust professional standardization might be difficult to decide, but setting an example in College Park might help advance those fields.

Many PhD programs have adapted an apprentice model; programs in laboratory fields are exemplary. The oldest and largest professional-doctorate programs prepare students for clinical disciplines through a concatenation of apprentice-like relationships. Professional-doctorate programs on our campus might well be proposed with no such feature. Whether such programs could be considered professional at all is a question worth considering.

Professional-doctorate programs might be expected to resemble each other in schedule, in on-campus attendance time, and in formal markers of progress. If so, then profession-specific needs might become hard to satisfy, making requests for waivers likely.

***7. Should professional-doctorate committees be open to members holding the degree (or some variety of the degree) to be awarded? Should they require the inclusion of one or more such members? Should they limit the number of members holding a degree OTHER than the one to be awarded?***

In a well established field, examiners holding the degree for whose attainment a candidate is being examined would be expected to form a majority of examining-committee members. Were a university to conclude that a committee so composed would not guarantee scholarly quality or not serve students well, then a program awarding such

a degree would not suit the institution. In a *less* well established field, a committee so composed might be aspirational yet impractical to form; it might even exclude the founders of the field. That said, universities doubting a field's future should refrain from awarding its degree.

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By what criteria should the Graduate School judge a new proposal — invited or not — for a professional doctorate on the College Park campus? We recommend that any professional-doctorate proposal do the following.

1) Explain the need it bids to meet.

A demand for doctoral training in a particular field should be demonstrated by evidence of interest among well qualified potential enrollees and by evidence that an already recognized profession has been facing a work-force deficiency whose repletion requires doctoral credentialing. The Graduate School should be cautious when a putatively *new* profession is more realistically described as an occupation whose members hope to *emerge* as a profession. Many recent campaigns for new professional doctorates have arisen in specific occupational sectors in which aggrandizement of a selected field would likely redistribute authority and income. The Graduate School should expect to see widely accepted evidence of the societal utility to be gained by endorsing an existing occupation's metamorphosis. Upon seeing such evidence, the Graduate School would still need to consider feasibility, fundability, and prospects for placement.

2) Explain why a Master's program cannot meet the need described.

Some new professional doctoral programs are difficult to distinguish from the terminal Master's programs against which they compete — or which they replaced. A Master's program with a practicum or internship and with a thesis or capstone project may not be much different from a professional doctoral program incorporating a Master's curriculum and adding an internship and a dissertation acceptable with or without clearance of a new-knowledge hurdle — or, absent a dissertation, a *doctoral* capstone project. Particularly ambiguous here is the nature of an internship. The classic internship, now somewhat reformed, was a live-in hospital year of constant life-and-death responsibility, poor food, and worse pay, all served *after*, not before, gaining a doctoral degree and all required for licensure in most every state as well as for advancement to residency and fellowship. The internships incorporated into professional doctoral programs range from obligatory



substantive training to little more than observational experiences whose supervisors may or may not hold doctorates, or any advanced degrees, and are unlikely to be members of a graduate faculty, even adjunctively. The Graduate School should be alert to the possibility that a future proposal assertively describing a professional doctorate may really be describing, as often charged by critics, “a glorified Master’s.” Any such proposal would need to be strengthened, so as to demonstrate more than marginal value added by doctoral status.

- 3) Explain why a PhD program cannot meet the need described.

The best argument for a professional doctoral program would be the stringency of a profession’s practical-experience requirement. The Graduate School should ask if a reliably substantial number of well qualified doctoral applicants otherwise interested in the University of Maryland found our existing PhD offerings insufficiently practical.

- 4) Specify and justify a coherent comprehensive course of study preparing graduate students for entry into, advancement within, and advancement *of* a particular profession.
- 5) Specify the *research* literature to be studied.
- 6) Specify the *practice* literature to be studied.
- 7) Specify the practical *experience* to be acquired.
- 8) Describe when, where, and how that experience would be acquired and how its acquisition would be confirmed.
- 9) Describe a dissertation or capstone requirement demonstrating professional scholarly abilities and accommodating, if not exacting, the generation of new practical knowledge.

This requirement would best be satisfied by the asking and answering of a well posed research question. A “dissertation in practice” should identify and solve a problem, preferably at some reliable level of generalizability. A capstone project would less likely meet this standard, although it could. “Capstones” are performed in many undergraduate courses and in Master’s programs; they are generally expected to “translate evidence into practice.” But the term is applied also to projects that do ask and answer new questions. The Graduate School should monitor professional doctoral dissertations and capstone projects carefully, and may choose to assign Dean’s Representatives to the latter as well as to the

former.

- 10) Describe the structure and function of an examining committee within Graduate School guidelines.
- 11) Describe plans to assist professional placement.
- 12) Describe plans to measure program outcomes.

# UMD DOCTORAL DEGREE SUMMARY

## FY 2013 DOCTORAL DEGREES



**DOCTORAL-RESEARCH SCHOLAR: 683**

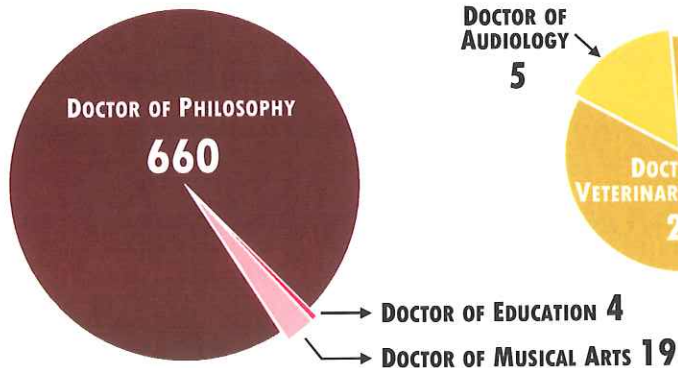
**DOCTORAL-PROFESSIONAL PRACTICE: 30**



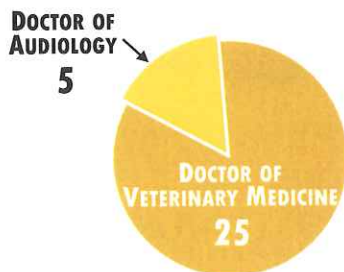
Degrees are reported based on the fiscal year. The degree data below represents the degrees awarded from July 1, 2012 through June 30, 2013.

### DEGREES AWARDED:

#### DOCTORAL-RESEARCH SCHOLAR



#### DOCTORAL-PROFESSIONAL PRACTICE



### TOP 10 DEGREES AWARDED:

#### DOCTORAL-RESEARCH SCHOLAR

- MECHANICAL ENGINEERING (36)
- ELECTRICAL ENGINEERING (30)
- PHYSICS (30)
- COMPUTER SCIENCE (29)
- BUSINESS & MANAGEMENT (26)
- CURRICULUM & INSTRUCTION (25)
- MUSIC: NON-MUSIC EDUCATION (19)
- CHEMISTRY (19)
- CIVIL ENGINEERING (19)
- COUNSELING & PERSONNEL SERVICES (17)

### DEGREES AWARDED BY COLLEGE :

#### DOCTORAL-RESEARCH SCHOLAR

College	Count	Percentage
A. James Clark School of Engineering	130	19.0%
College of Agriculture & Natural Resources	25	3.7%
College of Arts & Humanities	106	15.5%
College of Behavioral & Social Sciences	78	11.4%
College of Computer, Math & Natural Sciences	180	26.4%
College of Education	102	14.9%
College of Information Studies	2	0.3%
Philip Merrill College of Journalism	5	0.7%
Robert H. Smith School of Business	26	3.8%
School of Architecture, Planning, & Preservation	4	0.6%
School of Public Health	16	2.3%
School of Public Policy	9	1.3%
<b>TOTAL</b>	<b>683</b>	<b>100%</b>

#### DOCTORAL-PROFESSIONAL PRACTICE

College	Count	Percentage
College of Agriculture & Natural Resources	25	83.3%
College of Behavioral & Social Sciences	5	16.7%
<b>TOTAL</b>	<b>30</b>	<b>100%</b>

### DEGREES AWARDED BY RACE/ETHNICITY & GENDER:

#### DOCTORAL-RESEARCH SCHOLAR

	Female	Male	TOTAL	Percentage
White:U.S.	179	163	342	50.1%
Black or African American:U.S.	17	7	24	3.5%
Asian:U.S.	36	15	51	7.5%
Hispanic:U.S.	11	4	15	2.2%
Unknown:U.S.	4	12	16	2.3%
Two or More:U.S.	2	6	8	1.2%
Foreign	68	159	227	33.2%
<b>TOTAL</b>	<b>317</b>	<b>366</b>	<b>683</b>	<b>100%</b>

#### DOCTORAL-PROFESSIONAL PRACTICE

	Female	Male	TOTAL	Percentage
White:U.S.	8	4	12	40.0%
Asian:U.S.	2	1	3	10.0%
Unknown:U.S.	11	4	15	50.0%
<b>TOTAL</b>	<b>20</b>	<b>5</b>	<b>30</b>	<b>100%</b>

### DOCTORAL DEGREES AWARDED BY FISCAL YEAR

■ DOCTORAL-RESEARCH SCHOLAR  
■ DOCTORAL-PROFESSIONAL PRACTICE

