

Academic Program
Plan for Assessment of Student Learning Outcomes
College of Arts and Sciences
The University of New Mexico

A. College, Department and Date

1. College: *Arts & Sciences*
2. Department: *Biology*
3. Date: *March 11, 2016*

B. Academic Program of Study*

M.S., Biology, Plan I

C. Contact Person(s) for the Assessment Plan

Lee Taylor, Associate Professor and Associate Chair, fflt@unm.edu

D. Broad Program Goals & Measurable Student Learning Outcomes

[Attach Cover Sheet for Student Learning Outcomes and associated materials.]

OR

[List below:]

1. Broad Program Learning Goals for this Degree/Certificate Program

- A. A significant knowledge of biological theories, questions and approaches
- B. Capacity to conduct and communicate original, ethical research

2. List of Student Learning Outcomes (SLOs) for this Degree/Certificate Program [Your program should have at least 3 and these should be aligned with the program Goals (as indicated by A, B, C, etc.) and UNM's broad learning goals]

A.1. Obtain familiarity with theories, questions and approaches across major areas of biology.

UNM Goals (___√___ Knowledge ___√___ Skills ___ Responsibility)

A.2. Achieve understanding of the conceptual framework, major advances and important methodological approaches within their chosen discipline.

UNM Goals (___√___ Knowledge ___√___ Skills ___ Responsibility)

* Academic Program of Study is defined as an approved course of study leading to a certificate or degree reflected on a UNM transcript. A graduate-level program of study typically includes a capstone experience (e.g. thesis, dissertation, professional paper or project, comprehensive exam, etc.).

B.1. Demonstrate the capacity to design and carry out research to address knowledge gaps.

UNM Goals (Knowledge Skills Responsibility)

B.2. Awareness of ethical issues that intersect with scientific research.

UNM Goals (Knowledge Skills Responsibility)

B.3. Exhibit scientific oral and written communication that is clear, logical, and effective.

UNM Goals (Knowledge Skills Responsibility)

B.4. Demonstrate an ability to convincingly explain the importance and impact of his/her research in lay terms to scientists from other disciplines and the public.

UNM Goals (Knowledge Skills Responsibility)

E. Assessment of Student Learning Three-Year Plan

All programs are expected to measure some outcomes and report annually and to measure all program outcomes at least once over a three-year review cycle.

1. **Timeline for Assessment**

In the table below, briefly describe the timeframe over which your unit will conduct the assessment of learning outcomes selected for the three-year plan. List when outcomes will be assessed and which semester/year the results will be discussed and used to improve student learning (e.g., discussed with program faculty, interdepartmental faculty, advisory boards, students, etc.)

Year/Semester	Assessment Activities
Year 1, Fall	Administer Annual Graduate Survey. Test outcome of ethics workshop. Implement evaluative questions for oral presentation, defense and written thesis.
Year 1, Spring	Implement evaluative questions for oral presentation, defense and written thesis. Collate and analyze data for SLOs A.1. and A.2.
Year 2, Fall	Administer Annual Graduate Survey. Test outcome of ethics workshop.
Year 2, Spring	Implement evaluative questions for oral presentation, defense and written thesis. Collate and analyze data for SLOs B.1. and B.2.
Year 3, Fall	Administer Annual Graduate Survey. Test outcome of ethics workshop.
Year 3, Spring	Implement evaluative questions for oral presentation, defense and written thesis. Collate and analyze data for SLOs B.3. and B.4.

2. **How will learning outcomes be assessed?**

Three instruments will be used in assessment of our SLOs. 1) We carry out an online annual survey of graduate students. 2 & 3) We have added questions and associated rubrics to the OGS Report of Examination and Report on Thesis that will be filled out by the thesis/dissertation committee. The tools utilized to assess our SLOs are summarized in the table below.

Student Learning Outcome	Evaluation of Oral Presentation	Evaluation of Oral Examination	Evaluation of Written Thesis	Student Annual Survey	Ethics Test
A.1. Obtain familiarity with theories, questions and approaches across major areas of biology.		√			
A.2. Achieve understanding of the conceptual framework, major advances and important methodological approaches within their chosen subdiscipline.	√	√	√		
B.1. Demonstrate the capacity to design and carry out research to address knowledge gaps.	√		√	√	
B.2. Awareness of ethical issues that intersect with scientific research.					√
B.3. Evidence scientific communication that is clear, logical, and effective.	√		√		
B.4. Demonstrate an ability to convincingly explain the importance and impact of his/her research in lay terms to scientists from other disciplines and the public.	√	√			

A. What: A.1. Obtain familiarity with theories, questions and approaches across major areas of biology.

i. *Oral Examination (Defense)*

We assess students' appreciation of the breadth of biological research during the oral portion of the defense. The Biology Department's supplement to the OGS Report of Examination includes a question that assesses this component of a student's knowledge (see Appendix 1A.1). A rubric (Appendix 1) aids examiners in grading the student using a 5 point scale: poor, fair, acceptable, good, superior. This question is not a primary determinant of a pass or fail outcome.

ii. This measure is direct.

iii. Success in helping students develop a general appreciation of the breath of biological research will be defined as a rating of acceptable or better in 70% of oral exams.

What: A.2. Achieve understanding of the conceptual framework, major advances and important methodological approaches within their chosen discipline.

i. *Oral Examination (Defense)*

We will assess students' knowledge of their chosen discipline within biology during the oral portion of the examination. The Biology Department's supplement to the OGS thesis defense form evaluates depth of knowledge in the specific discipline (Appendix 1A.2).

ii. These measures are direct.

iii. Criteria for success are that 70% of students score acceptable or above on the depth of knowledge assessment.

i. *Evaluation of Written Thesis*

We expect students to demonstrate depth of knowledge in their chosen subdiscipline in their written theses. The thesis should demonstrate not only understanding of their subdiscipline but ability to analyze, criticize and compare their work with the body of literature relevant to their subdiscipline. The Biology Department's supplement to the OGS Report on Thesis will be filled out by each member of the student's thesis committee (Appendix 1B.1).

ii. These measures are direct.

iii. Criteria for success are that 70% of students score acceptable or above on the depth of knowledge assessment.

What: B.1. Demonstrate the capacity to design and carry out research to address knowledge gaps.

i. *Evaluation of Written Thesis*

We will evaluate each students' ability to create original research, implement it and interpret it as demonstrated by their written thesis. The Biology Department's supplement to the OGS Report on Thesis will be filled out by each member of the student's thesis committee (Appendix 1B.2).

ii. These measures are direct.

iii. Criteria for success are that 70% of students score acceptable or above on the depth of knowledge assessment.

i. *Annual Student Survey – Publications*

We will tabulate data from the Annual Graduate Survey (Appendix 2) to determine whether students are publishing their research in peer-reviewed journals, as a measure of capacity to design and carry out research to address knowledge gaps.

ii. These measures are direct.

iii. Criteria for success are that 50% of students publish at least one manuscript based on their thesis project to a peer-reviewed scientific journal. Note that publication of their thesis research after leaving UNM would also contribute to meeting this objective. Such publications will be tracked via student Google Scholar profiles.

What: B.2. Awareness of ethical issues that intersect with scientific research.

i. *Ethics training and testing*

All Biology graduate students are expected to complete the tutorial Overview of Responsible Conduct of Research available at <http://grad.unm.edu/aire/> and complete the Scientific Integrity course by William Gannon that is part of our graduate orientation. At the end of this short-course, students will complete an examination.

ii. These measures are direct.

iii. Criteria for success are that 80% of students exhibit a strong ethical framework with respect to biological research as assessed in the examination described above.

What: B.3. Exhibit scientific oral and written communication that is clear, logical, and effective.

i. *Oral Communication - Thesis Presentation*

As part of their defense, MS I students give a formal public presentation of their research that is attended by all committee members, after which the defense examination takes place. A question on the Biology Department's supplement to the OGS thesis defense form specifically evaluates communication skills (Appendix 1A.4).

ii. These measures are direct.

iii. Criteria for success are that 70% of students score acceptable or above on the oral communication assessment.

i. *Written Communication – Evaluation of Written Thesis*

All MS I students turn in a written thesis describing their research that must be approved by all committee members. Student skills in written scientific communication will be evaluated by using the supplemental question on the OGS Report on Thesis filled out by each member of the student's thesis committee (Appendix 1B.3).

ii. This measure is direct.

iii. Success will be defined as a rating of acceptable or better in 70% of thesis evaluations.

i. *Written Communication - Publications*

Acceptance of a research publication after peer-review is one indicator of effective scientific communication. We will track student publication of their research using the Annual Graduate Survey (Appendix 2) and verified using services such as the Web of Science and/or Google Scholar. Setting up a Google Scholar account is a requirement for incoming graduate students and will be part of the orientation workshop that the students attend at the beginning of their graduate program.

ii. These measures are direct.

iii. Criteria for success are that 50% of our MS I students publish one peer-reviewed paper as a result of their tenure at UNM.

What: B.4. Demonstrate an ability to convincingly explain the importance and impact of his/her research in lay terms to scientists from other disciplines and the public.

i. *Oral Communication - Thesis Presentation*

All MS I students give an oral presentation of their thesis research. Their thesis committee will evaluate the degree to which their presentation communicates the importance/impact of their work in a way that can be understood by scientists from other disciplines and the public.

ii. These measures are direct.

iii. Criteria for success are that 70% of students score are deemed successful in communicating the importance and impact of their work.

3. What is the unit's process to analyze/interpret assessment data and use results to improve student learning?

Briefly describe:

1. *who will participate in the assessment process (the gathering of evidence, the analysis/interpretation, recommendations).*

SLOs and assessment plans will be placed on the Biology web site and incoming students will be alerted to these important documents during orientation, the week before Fall classes. The Graduate Coordinator and Department Data Manager will work with the Graduate Policy Committee (GPC) to administer the online annual survey and to disseminate and instruct faculty in the use of the new evaluative questions connected to the thesis defense. All faculty who serve on graduate committees will participate in applying the new evaluative questions. The data will be summarized using bar charts and other standard graphics and summary statistics such as means and standard deviations.

2. *the process for consideration of the implications of assessment for change:*
a. to assessment mechanisms themselves,
b. to curriculum design,
c. to pedagogy
...in the interest of improving student learning.

The GPC will meet to review and discuss the assessment data after each yearly assessment and will evaluate the effectiveness of our graduate program in light of our agreed upon student learning outcomes. The committee will then draft recommendations for how the department might address areas of concern (e.g. if the publication rate is perceived as too low, how can we modify our graduate curriculum to improve writing skills and motivate publication?). Additional faculty input will be requested by email and in the annual spring faculty meeting focused on our graduate programs. If certain areas appear particularly problematic, new faculty committees will be composed to attempt to address these issues. Note that nearly all Biology faculty committees include a graduate student member.

Nearly all our students take our Graduate Ecology and Graduate Evolution courses, so these classes will be a focus for pedagogical efforts. However, other areas may

best be addressed outside the classroom, e.g. by changes in the incentives or requirements of our graduate program.

3. How, when, and to whom will recommendations be communicated?

A summary of the meeting will be generated, and will be distributed on Biofac, our Biology Faculty listserv. We will also discuss some of the findings of our assessment efforts annually at a meeting of the Biology Graduate Student Association (BGSA).

ATTACHMENTS.

Appendix 1: New evaluative questions added to OGS forms

Appendix 2: Graduate annual survey

Appendix 1: New evaluative questions added to OGS forms

A. Addendum to OGS Report of Examination

To be filled out by student committee at the end of the closed-door post-presentation oral exam. The rubric for evaluating performance on these components is as follows:

- 1 = Poor. Demonstrates limited knowledge or skills that fall below those expected for this graduate degree in biology.
- 2 = Fair. Demonstrates areas of knowledge and/or skills, but also exhibits significant gaps relative to what is expected for this graduate degree in Biology.
- 3 = Acceptable. Demonstrates a typical level of expected skills and/or knowledge appropriate to carry out academic and/or professional activities requiring this graduate degree in Biology.
- 4 = Good. Demonstrates considerable skills and/or knowledge in this dimension, beyond that required to function professionally as a holder of this graduate degree in Biology.
- 5 = Superior. Demonstrates advanced skills and/or knowledge in this dimension that far exceed those of a typical student who has completed this graduate degree in Biology.

1. In the oral presentation and examination, to what extent did the student demonstrate knowledge and understandings of important theories, questions and approaches across major areas of biology?

Circle one: 1 2 3 4 5

Comments:

2. In the oral presentation and examination, to what extent did the student demonstrate a firm grasp of the conceptual framework, major advances and important methodological approaches within their chosen subdiscipline.

Circle one: 1 2 3 4 5

Comments:

3. In the oral presentation and examination, to what extent did the student demonstrate the capacity to effectively design and carry out research to address knowledge gaps.

Circle one: 1 2 3 4 5

Comments:

4. In the oral presentation, to what extent did the student demonstrate scientific communication that is clear, logical, and effective.

Circle one: 1 2 3 4 5

Comments:

B. Addendum to OGS Report on Thesis or Dissertation

1. In the written thesis/dissertation, to what extent did the student demonstrate a firm understanding of the conceptual framework, major advances and important methodological approaches within their chosen subdiscipline.

Circle one: 1 2 3 4 5

Comments:

2. In the written thesis/dissertation, to what extent did the student demonstrate the capacity to design and carry out research to address knowledge gaps.

Circle one: 1 2 3 4 5

Comments:

3. In the written thesis/dissertation, to what extent did the student demonstrate scientific communication that is clear, logical, and effective.

Circle one: 1 2 3 4 5

Comments:

Appendix 2: Graduate annual survey

See end of PDF.

Academic Program
Plan for Assessment of Student Learning Outcomes
College of Arts and Sciences
The University of New Mexico

A. College, Department and Date

1. College: *Arts & Sciences*
2. Department: *Biology*
3. Date: *March 11, 2016*

B. Academic Program of Study*

M.S., Biology, Plan II (non-thesis)

C. Contact Person(s) for the Assessment Plan

Lee Taylor, Associate Professor and Associate Chair, fflt@unm.edu

D. Broad Program Goals & Measurable Student Learning Outcomes

[Attach Cover Sheet for Student Learning Outcomes and associated materials.]

OR

[List below:]

1. Broad Program Learning Goals for this Degree/Certificate Program

- C. Knowledge of fundamental facts and theories across biology.
- D. Familiarity with ongoing areas of research in biology.
- E. An appreciation of the need for an ethical framework in biology.

2. List of Student Learning Outcomes (SLOs) for this Degree/Certificate Program [Your program should have at least 3 and these should be aligned with the program Goals (as indicated by A, B, C, etc.) and UNM's broad learning goals]

A.1. Capacity to explain fundamental facts and major theories in genetics, molecular-cell biology, ecology, evolution, and development.

UNM Goals (Knowledge Skills Responsibility)

A.2. Ability to connect current outstanding questions in biology to appropriate methods of inquiry and analysis.

* Academic Program of Study is defined as an approved course of study leading to a certificate or degree reflected on a UNM transcript. A graduate-level program of study typically includes a capstone experience (e.g. thesis, dissertation, professional paper or project, comprehensive exam, etc.).

UNM Goals (Knowledge Skills Responsibility)

B.1. Ability to list and explain the importance of cutting-edge research topics in a chosen subdiscipline of biology.

UNM Goals (Knowledge Skills Responsibility)

C.1. Awareness of ethical issues that intersect with scientific research

UNM Goals (Knowledge Skills Responsibility)

E. Assessment of Student Learning Three-Year Plan

All programs are expected to measure some outcomes and report annually and to measure all program outcomes at least once over a three-year review cycle.

2. **Timeline for Assessment**

In the table below, briefly describe the timeframe over which your unit will conduct the assessment of learning outcomes selected for the three-year plan. List when outcomes will be assessed and which semester/year the results will be discussed and used to improve student learning (e.g., discussed with program faculty, interdepartmental faculty, advisory boards, students, etc.)

Year/Semester	Assessment Activities
Year 1, Fall	Administer Annual Graduate Survey. Test outcome of ethics workshop. Implement evaluative questions for oral presentation, defense and written thesis.
Year 1, Spring	Implement evaluative questions for oral presentation, defense and written thesis. Collate and analyze data for SLOs A.1. and A.2.
Year 2, Fall	Administer Annual Graduate Survey. Test outcome of ethics workshop.
Year 2, Spring	Implement evaluative questions for oral presentation, defense and written thesis. Collate and analyze data for SLO B.1.
Year 3, Fall	Administer Annual Graduate Survey. Test outcome of ethics workshop.
Year 3, Spring	Implement evaluative questions for oral presentation, defense and written thesis. Collate and analyze data for SLO C.1.

2. **How will learning outcomes be assessed?**

A. What: A.1. Capacity to explain fundamental facts and major theories in genetics, molecular-cell biology, ecology, evolution, and development.

i. *Oral Examination*

We assess students' appreciation of the breadth of knowledge during the oral examination. The Biology Department's supplement to the OGS Report of Examination includes a question that assesses this component of a student's

knowledge (see Appendix 1A.1). A rubric (Appendix 1) aids examiners in grading the student using a 5 point scale: poor, fair, acceptable, good, superior. This question is not a primary determinant of a pass or fail outcome.

- ii. This measure is direct.
- iii. Success will be defined as a rating of acceptable or better in 70% of oral exams.

What: A.2. Ability to connect current outstanding questions in biology to appropriate methods of inquiry and analysis.

i. *Oral Examination*

We will assess students' ability to connect current outstanding questions in biology to appropriate methods of inquiry and analysis during the oral examination.

- ii. These measures are direct.
- iii. Criteria for success are that 70% of students score acceptable or above on the depth of knowledge assessment.

What: B.1. Ability to list and explain the importance of cutting-edge research topics in a chosen subdiscipline of biology.

i. *Oral Examination*

We will assess students' ability to list and explain the importance of cutting-edge research topics in a chosen subdiscipline of biology during the oral examination.

- ii. These measures are direct.
- iii. Criteria for success are that 70% of students score acceptable or above on the depth of knowledge assessment.

What: B.2. Awareness of ethical issues that intersect with scientific research

i. *Ethics training and testing*

All Biology graduate students are expected to complete the tutorial Overview of Responsible Conduct of Research available at <http://grad.unm.edu/aire/> and complete the Scientific Integrity course by William Gannon that is part of our graduate orientation. At the end of this short-course, students will complete an examination.

- ii. These measures are direct.
- iii. Criteria for success are that 80% of students exhibit a strong ethical framework with respect to biological research as assessed in the examination described above.

3. What is the unit's process to analyze/interpret assessment data and use results to improve student learning?

Briefly describe:

1. *who will participate in the assessment process (the gathering of evidence, the analysis/interpretation, recommendations).*

SLOs and assessment plans will be placed on the Biology web site and incoming students will be alerted to these important documents during orientation, the week before Fall

classes. The Graduate Coordinator and Department Data Manager will work with the Graduate Policy Committee (GPC) to administer the online annual survey and to disseminate and instruct faculty in the use of the new evaluative questions connected to the thesis defense. All faculty who serve on graduate committees will participate in applying the new evaluative questions. The data will be summarized using bar charts and other standard graphics and summary statistics such as means and standard deviations.

2. *the process for consideration of the implications of assessment for change:*
 - a. *to assessment mechanisms themselves,*
 - b. *to curriculum design,*
 - c. *to pedagogy**...in the interest of improving student learning.*

The GPC will meet to review and discuss the assessment data after each yearly assessment and will evaluate the effectiveness of our graduate program in light of our agreed upon student learning outcomes. The committee will then draft recommendations for how the department might address areas of concern. Additional faculty input will be requested by email and in the annual spring faculty meeting focused on our graduate programs. If certain areas appear particularly problematic, new faculty committees will be composed to attempt to address these issues. Note that nearly all Biology faculty committees include a graduate student member.

Nearly all our students take our Graduate Ecology and Graduate Evolution courses, so these classes will be a focus for pedagogical efforts. However, other areas may best be addressed outside the classroom, e.g. by changes in the incentives or requirements of our graduate program.

3. *How, when, and to whom will recommendations be communicated?*

A summary of the meeting will be generated, and will be distributed on Biofac, our Biology Faculty listserve. We will also discuss some of the findings of our assessment efforts annually at a meeting of the Biology Graduate Student Association (BGSA).

ATTACHMENTS.

Appendix 1: New evaluative questions added to OGS forms

Appendix 2: Graduate annual survey

Appendix 1: New evaluative questions added to OGS forms

A. Addendum to OGS Report of Examination

To be filled out by student committee at the end of the closed-door post-presentation oral exam. The rubric for evaluating performance on these components is as follows:

- 1 = Poor. Demonstrates limited knowledge or skills that fall below those expected for this graduate degree in biology.
- 2 = Fair. Demonstrates areas of knowledge and/or skills, but also exhibits significant gaps relative to what is expected for this graduate degree in Biology.
- 3 = Acceptable. Demonstrates a typical level of expected skills and/or knowledge appropriate to carry out academic and/or professional activities requiring this graduate degree in Biology.
- 4 = Good. Demonstrates considerable skills and/or knowledge in this dimension, beyond that required to function professionally as a holder of this graduate degree in Biology.
- 5 = Superior. Demonstrates advanced skills and/or knowledge in this dimension that far exceed those of a typical student who has completed this graduate degree in Biology.

5. In the oral examination, to what extent did the student demonstrate a capacity to explain fundamental facts and major theories in genetics, molecular-cell biology, ecology, evolution, and development?

Circle one: 1 2 3 4 5

Comments:

6. In the oral examination, to what extent did the student demonstrate an ability to connect current outstanding questions in biology to appropriate methods of inquiry and analysis.

Circle one: 1 2 3 4 5

Comments:

7. In the oral examination, to what extent did the student demonstrate an ability to list and explain the importance of cutting-edge research topics in a chosen subdiscipline of biology.

Circle one: 1 2 3 4 5

Comments:

Appendix 2: Graduate annual survey

See next page.

Annual graduate student survey

This survey will be conducted online toward the end of the Fall semester to collect data directly from the student. The information from a particular student will be supplied to the student's major advisor for use in mentoring and program progression. Data will be private, viewable only by the student, the student's major advisor and the Graduate Program Coordinator (Cheryl Martin). Aggregate data will be provided to the Graduate Policy Committee and the Biology Faculty.

* Required

1. Name *

(Last name, First name)

.....

2. Year entered program *

.....

3. Major Advisor *

(Last name, First name)

.....

4. Subject(s) of Thesis/Dissertation *

provide up to 5 keywords

.....

Presentations

Answer questions based on your activities over the period 1/1/2015 to 12/31/2015

5. Did you present at Brown bag in the preceding year? *

Mark only one oval.

Yes

No

6. Did you present a poster or a talk at a scientific venue in the preceding year? *

Mark only one oval.

Yes

No *Skip to question 34.*

Presentation 1 details

7. Name of event

(e.g. Ecological Society of America annual meeting)

.....

8. Location

(e.g. Baltimore, MD)

.....

9. Type of event

Mark only one oval.

- Local
- National
- International

10. Type of presentation

Mark only one oval.

- Talk
- Poster

11. Audience

Mark only one oval.

- Scientific
- General Public

12. Title of presentation

.....

13. Add another presentation?

Mark only one oval.

- Yes *Skip to question 14.*
- No *Skip to question 34.*

Presentation 2 details

14. Name of event

.....

15. Location

.....

16. Type of event

Mark only one oval.

- Local
- National
- International

17. Type of presentation

Mark only one oval.

- Talk
- Poster

18. Audience

Mark only one oval.

- Scientific
- General Public

19. Title of presentation

.....

20. Add another presentation?

Mark only one oval.

- Yes *Skip to question 21.*
- No *Skip to question 34.*

Presentation 3 details

21. Name of event

.....

22. Location

.....

23. Type of event

Mark only one oval.

- Local
- National
- International

24. Type of presentation

Mark only one oval.

- Talk
 Poster

25. Audience

Mark only one oval.

- Scientific
 General Public

26. Title of presentation

.....

27. Add another presentation?

Mark only one oval.

- Yes *Skip to question 28.*
 No *Skip to question 34.*

Presentation 4 details

28. Name of event

.....

29. Location

.....

30. Type of event

Mark only one oval.

- Local
 National
 International

31. Type of presentation

Mark only one oval.

- Talk
 Poster

32. Audience

Mark only one oval.

- Scientific
- General Public

33. Title of presentation

.....

Publications

Answer questions based on your activities 1/1/2015 to 12/31/2015

34. Did you author or co-author a submitted article in the preceding year? *

(as long as you have submitted something, it's okay if it was not, or has not been accepted yet)

Mark only one oval.

- Yes *Skip to question 35.*
- No *Skip to question 67.*

Publication 1 details

Answer questions based on your activities 1/1/2015 to 12/31/2015

35. Is this a peer-reviewed publication?

Mark only one oval.

- Yes
- No

36. Publication type

Mark only one oval.

- Journal article
- Book chapter
- Other:

37. If you chose "Other", please describe:

.....

38. Authors

(Last name, first initial; Last name, first initial; etc)

.....

39. Journal/Book Title

.....

40. Paper/Chapter Title

.....

41. Status

Mark only one oval.

- Submitted (in review)
- In revision
- Accepted
- Rejected
- In print

42. Add another publication?

Mark only one oval.

- Yes Skip to question 43.
- No Skip to question 67.

Publication 2 details

Answer questions based on your activities 1/1/2015 to 12/31/2015

43. Is this a peer-reviewed publication?

Mark only one oval.

- Yes
- No

44. Publication type

Mark only one oval.

- Journal article
- Book chapter
- Other:

45. If you chose "Other", please describe:

.....

46. Authors

.....

47. Journal/Book Title

.....

48. Paper/Chapter Title

.....

49. Status

Mark only one oval.

- Submitted (in review)
- In revision
- Accepted
- Rejected
- In print

50. Add another publication?

Mark only one oval.

- Yes
- No *Skip to question 67.*

Publication 3 details

Answer questions based on your activities 1/1/2015 to 12/31/2015

51. Is this a peer-reviewed publication?

Mark only one oval.

- Yes
- No

52. Publication type

Mark only one oval.

- Journal article
- Book chapter
- Other:

53. If you chose "Other", please describe:

.....

54. Authors

.....

55. Journal/Book Title

.....

56. Paper/Chapter Title

.....

57. Status

Mark only one oval.

- Submitted (in review)
- In revision
- Accepted
- Rejected
- In print

58. Add another publication?

Mark only one oval.

- Yes Skip to question 59.
- No Skip to question 67.

Publication 4 details

Answer questions based on your activities 1/1/2015 to 12/31/2015

59. Is this a peer-reviewed publication?

Mark only one oval.

- Yes
- No

60. Publication type

Mark only one oval.

- Journal article
- Book chapter
- Other:

61. If you chose "Other", please describe:

.....

62. Authors

.....

63. Journal/Book Title

.....

64. Paper/Chapter Title
.....**65. Status**

Mark only one oval.

- Submitted (in review)
- In revision
- Accepted
- Rejected
- In print

Other publications

66. Did you author or co-author a publication in a different format (i.e. not a peer-reviewed scientific journal or book) in the preceding year? Please describe:

.....**Grant applications**

Answer questions based on your activities 1/1/2015 to 12/31/2015

67. Did you write and submit a proposal/application for funding in any form in the preceding year? *

(does not matter the outcome, as long as it was submitted)

Mark only one oval.

- Yes
- No *Skip to question 121.*

Proposal 1 application details

Answer questions based on your activities 1/1/2015 to 12/31/2015

68. Agency

.....

69. Program/Panel/Opportunity

.....

70. Type of funding

Check all that apply.

- Research support
- Travel support
- Stipend
- Other:

71. If you chose "Other", please describe:

.....

72. Type of funding source

Mark only one oval.

- Federal
- State
- Private
- Intramural (within UNM)
- Departmental (Biology or BGSA)

73. Requested amount

.....

74. Title of proposal

.....

75. Status

Mark only one oval.

- Funded
- Not funded
- Pending

76. Add another proposal submission?

Mark only one oval.

- Yes
- No *Skip to question 121.*

Proposal 2 application details

Answer questions based on your activities 1/1/2015 to 12/31/2015

77. Agency
.....**78. Program/Panel/Opportunity**
.....**79. Type of funding**

Check all that apply.

- Research support
- Travel support
- Stipend
- Other:

80. If you chose "Other", please describe:
.....**81. Type of funding source**

Mark only one oval.

- Federal
- State
- Private
- Intramural (within UNM)
- Departmental (Biology or BGSA)

82. Requested amount
.....**83. Title of proposal**
.....**84. Status**

Mark only one oval.

- Funded
- Not funded
- Pending

85. Add another proposal submission?

Mark only one oval.

Yes

No *Skip to question 121.*

Proposal 3 application details

Answer questions based on your activities 1/1/2015 to 12/31/2015

86. Agency

.....

87. Program/Panel/Opportunity

.....

88. Type of funding

Check all that apply.

Research support

Travel support

Stipend

Other:

89. If you chose "Other", please describe:

.....

90. Type of funding source

Mark only one oval.

Federal

State

Private

Intramural (within UNM)

Departmental (Biology or BGSA)

91. Requested amount

.....

92. Title of proposal

.....

93. Status

Mark only one oval.

- Funded
- Not funded
- Pending

94. Add another proposal submission?

Mark only one oval.

- Yes
- No *Skip to question 121.*

Proposal 4 application details

Answer questions based on your activities 1/1/2015 to 12/31/2015

95. Agency

.....

96. Program/Panel/Opportunity

.....

97. Type of funding

Check all that apply.

- Research support
- Travel support
- Stipend
- Other:

98. If you chose "Other", please describe:

.....

99. Type of funding source

Mark only one oval.

- Federal
- State
- Private
- Intramural (within UNM)
- Departmental (Biology or BGSA)

100. Requested amount

.....

101. Title of proposal

.....

102. Status

Mark only one oval.

- Funded
- Not funded
- Pending

103. Add another proposal submission?

Mark only one oval.

- Yes
- No *Skip to question 121.*

Proposal 5 application details

Answer questions based on your activities 1/1/2015 to 12/31/2015

104. Agency

.....

105. Program/Panel/Opportunity

.....

106. Type of funding

Check all that apply.

- Research support
- Travel support
- Stipend
- Other:

107. If you chose "Other", please describe:

.....

108. Type of funding source

Mark only one oval.

- Federal
- State
- Private
- Intramural (within UNM)
- Departmental (Biology or BGSA)

109. Requested amount

.....

110. Title of proposal

.....

111. Status

Mark only one oval.

- Funded
- Not funded
- Pending

112. Add another proposal submission?

Mark only one oval.

- Yes
- No *Skip to question 121.*

Proposal 6 application details

Answer questions based on your activities 1/1/2015 to 12/31/2015

113. Agency

.....

114. Program/Panel/Opportunity

.....

115. Type of funding

Check all that apply.

Research support

Travel support

Stipend

Other:

116. If you chose "Other", please describe:

.....

117. Type of funding source

Mark only one oval.

Federal

State

Private

Intramural (within UNM)

Departmental (Biology or BGSA)

118. Requested amount

.....

119. Title of proposal

.....

120. Status

Mark only one oval.

Funded

Not funded

Pending

Professional development

Answer questions based on your activities 1/1/2015 to 12/31/2015

121. Did you attend any professional/scientific meetings or workshops in the preceding year? *

Mark only one oval.

Yes

No *Skip to question 146.*

Meeting/Workshop 1 details

122. Name of event

.....

123. Location

.....

124. Type of event

Mark only one oval.

- Local
- National
- International

125. Format of Event

Mark only one oval.

- Scientific Conference
- Scientific Workshop
- Training Course

126. Add another workshop/meeting?

Mark only one oval.

- Yes
- No *Skip to question 146.*

Meeting/Workshop 2 details

127. Name of event

.....

128. Location

.....

129. Type of event

Mark only one oval.

- Local
- National
- International

130. Format of Event

Mark only one oval.

- Scientific Conference
- Scientific Workshop
- Training Course

131. Add another workshop/meeting?

Mark only one oval.

- Yes
- No *Skip to question 146.*

Meeting/Workshop 3 details

132. Name of event

.....

133. Location

.....

134. Type of event

Mark only one oval.

- Local
- National
- International

135. Format of Event

Mark only one oval.

- Scientific Conference
- Scientific Workshop
- Training Course

136. Add another workshop/meeting?

Mark only one oval.

- Yes
- No *Skip to question 146.*

Meeting/Workshop 4 details

137. Name of event

.....

138. Location
.....**139. Type of event**

Mark only one oval.

- Local
 National
 International

140. Format of Event

Mark only one oval.

- Scientific Conference
 Scientific Workshop
 Training Course

141. Add another workshop/meeting?

Mark only one oval.

- Yes
 No *Skip to question 146.*

Meeting/Workshop 5 details

142. Name of event
.....**143. Location**
.....**144. Type of event**

Mark only one oval.

- Local
 National
 International

145. **Format of Event**

Mark only one oval.

- Scientific Conference
- Scientific Workshop
- Training Course

Professional development continued

Answer questions based on your activities 1/1/2015 to 12/31/2015

146. **Did you meet with any scientists visiting UNM in the preceding year? ***

Mark only one oval.

- Yes
- No

147. **If yes, with whom did you meet?**

.....

.....

.....

.....

.....

148. **What format(s)?**

Mark only one oval.

- One-on-one
- Group gathering
- Both

149. **With how many scientists outside UNM did you engage in substantial conversations over the last year? ***

“Substantial” is obviously subjective, but would usually entail a conversation about possible collaboration and/or future employment and involve exchange of contact information.

Mark only one oval.

- 0
- 1-2
- 3-5
- 6+

150. How many collaborations outside of the Department of Biology did you establish in the preceding year? *

Ordinarily, a significant collaboration would involve sharing of data, samples or ideas expected to result in a publication.

Mark only one oval.

- 0
- 1-2
- 3-5
- 6+

151. Of which scientific/professional societies are you currently a member?

.....

152. Are you currently serving on committees or leadership positions with any scientific/professional societies? Please list:

.....
.....
.....
.....
.....

153. Did you help organize or host a professional event in the preceding year?

Mark only one oval.

- No
- Yes

154. If yes, please describe

.....
.....
.....
.....
.....

155. **Did you engage in professional networking not described above in the preceding year? Please describe:**

.....

.....

.....

.....

.....

Teaching, mentoring, and outreach

Answer questions based on your activities 1/1/2015 to 12/31/2015

156. **Did you serve as a teaching assistant in the preceding year? ***

Mark only one oval.

- Yes, 1 semester
- Yes, 2 semesters
- No

157. **If yes, which course(s)?**

.....

.....

.....

.....

.....

158. **Did you participate in curriculum development or improvement in the preceding year? Please describe:**

.....

.....

.....

.....

.....

159. **Did you formally or informally mentor a student in biological research in the preceding year? Please describe:**

.....

.....

.....

.....

.....

160. Did you participate in other forms of biology-related outreach in the preceding year? Please describe:

.....

.....

.....

.....

.....

Awards

161. Did you receive any awards for your presentations or publications in the preceding year? Please describe:

.....

162. Did you receive any awards for teaching in the preceding year? Please describe:

.....

163. Did you receive any other awards or recognition not mentioned above? Please describe"

.....

164. Are there other things we should know about your efforts or accomplishments in the preceding year?

.....

