

**Certificate in Genomic Advocacy**  
**Indiana State University at Terre Haute Indiana**

1. Characteristics of Program

- a. Campus: Indiana State University
- b. Scope of Delivery: State, National, and possibly international
- c. Mode of Delivery: Distance programs as well as hybrid delivery
- d. Other Delivery Aspects: NA
- e. Academic Units offering program: College of Arts and Sciences, College of Business, College of Nursing, Health, and Human Services, and the College of Technology

2. Rationale for program

a. Institutional Rationale

Why in the institution proposing this program? The Center for Genomic Advocacy was created via the institutions Unbounded Possibilities (UP) initiative. UP was a vehicle for the university to look at emerging societal problems and concerns and develop integrative ways of addressing such concerns. The Center for Genomic Advocacy is part of Goal 4 of the strategic plan: Strengthen and Leverage Distinctive programs and programs of promise. The Certificate program leverages existing programs in Biology, Political Science, Insurance and Risk Management, and Philosophy, as well as, current courses in those programs. Additional elective courses are found in existing programs in Human Resource management. The interdisciplinary nature of the certificate will give students the ability to have other avenues of specialization within their degree via a certificate creating a dynamic workforce with the ability to adapt to changing technologies and scientific discoveries.

ISU Strategic Plan Home page: <http://irt2.indstate.edu/ir/index.cfm/sp/index>

Goal 4 <http://irt2.indstate.edu/ir/assets/splan/goals/stratplangoal4.pdf>

<http://irt2.indstate.edu/ir/index.cfm/sp/wh/goal4>

Goal 4 Initiative 4 <http://www.indstate.edu/up/docs/CP/UP%2012-05%20Elaina%20Tuttle.pdf>

b. State Rationale

This program does not directly affect undergraduate enrollment since it is a graduate certificate, and hence does not directly address the priorities as reflected in *Reaching Higher, Achieving More*. However, the certificate could enhance undergraduate priorities as many of the courses in the program are available to undergraduates since they are 4/500 level offerings.

Undergraduates could take such courses as electives to enhance the work they are doing in their undergraduate majors that could lead to increased marketability in a variety of fields.

### C. Evidence of Labor Market need

Genomics is becoming commonplace in everyday life. Indiana needs a work force that is prepared for how genomics will shape disciplines and careers. For example, genomics is revolutionizing health care. It is the key to "personalized medicine" where diagnoses are tailored to your specific genetic make-up, thereby rendering treatments safer and more effective. With genomics we will be able to develop medical treatments for both rare and common diseases (e.g. breast cancer, colon cancer, prostate cancer, diabetes, obesity, depression), as well as move toward system of "preventative medicine".

Privacy and security of personal information, both key concerns in the collection and management of health information, are intensified since inadvertent disclosure of genetic information not only violates the rights of the individual, but that of his/her family. Even when the information is de-identified, protection of such information through user education, information access and sharing policy, and procedural and technological schemes of security is of critical importance. With genomic advances, policymakers will need to act as partners/facilitators of basic research, setting clear standards for its responsible use, while articulating standards, evaluating processes to measure the relative risks and rewards, and establishing sanctions for those who violate policy.

Furthermore, genomic technology has fostered the development of genetically modified foods (GM foods) that are higher in nutrition and more resistant to disease than standard crops. With GM foods we can ensure that there will be an adequate food supply for the almost 7 billion people that inhabit the Earth today, and for the 10 billion that may inhabit the Earth in the next 40 years.

#### i. Preparation for Graduate Programs or Other Benefits

- This is a professional development program for working professionals, and also a Graduate Certificate for students in various disciplines.

#### ii. National, State, or Regional Studies

- Not applicable

#### iii. Surveys of Employers or Students and Analyses of Job Postings

- Not applicable

#### iv. Letters of Support

- Summarize, by source, the letters received in support of the program.

### **3. Cost of and Support for the Program**

#### a. Costs

##### i. Faculty and Staff

- Faculty and staff are already in place since the courses are currently offered.

##### ii. Facilities

- Not applicable

##### iii. Other Capital Costs (e.g. Equipment)

- Not applicable

#### b. Support

##### i. Nature of Support (New, Existing, or Reallocated)

- The courses are existing so no additional support is necessary.

##### ii. Special Fees above Baseline Tuition

- Not applicable

### **4. Similar and Related Programs**

#### a. List of Programs and Degrees Conferred

##### i. Similar Programs at Other Institutions

There are no other similar certificates at other institutions.

##### ii. Related Programs at the Proposing Institution

Not applicable. The certificate can enhance programs in Biology, Human Resources Development, Insurance, Political Science, Criminology and Criminal Justice, and Nursing/Health Sciences to name a few.

b. List of Similar Programs Outside Indiana

- Not applicable.

c. Articulation of Associate/Baccalaureate Programs

Not applicable.

d. Collaboration with Similar or Related Programs on Other Campuses

- This certificate is a collaboration among the College of Arts and Sciences, the Scott College of Business, College of Technology, and The College of Nursing Health and Human Services. Courses for the certificate are drawn from these programs.

**5. Quality and Other Aspects of the Program**

a. Credit Hours Required/Time To Completion

- 15 credits are required. The certificate can be completed in one year.

b. Exceeding the Standard Expectation of Credit Hours

- Not applicable.

c. Program Competencies or Learning Outcomes

- List the significant competencies or learning outcomes that students completing this program are expected to master.

d. Assessment

- Summarize how the institution intends to assess students with respect to mastery of program competencies or learning outcomes.

e. Licensure and Certification

- Not applicable

f. Placement of Graduates

- Recipients of the certificate may find enhanced employment opportunities as described in the rationale and description above.

g. Accreditation

- Not applicable

**6. Projected Headcount and FTE Enrollments and Degrees Conferred**

- The certificate is expected to have 10 to 15 enrolled students per year.

**6. Projected Headcount and FTE Enrollments and Degrees Conferred**

Date, 2012

Institution/Location: University XYZ at \_\_\_\_\_

Program: Program ABC

	Year 1 FY2012	Year 2 FY2013	Year 3 FY2014	Year 4 FY2015	Year 5 FY2016
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**Enrollment Projections (Headcount)**

Full-Time	6	12	18	18	18
Part-Time	12	24	36	48	60
<b>Total</b>	<b>18</b>	<b>36</b>	<b>54</b>	<b>66</b>	<b>78</b>

**Enrollment Projections (FTE)**

Full-Time	6	12	18	18	18
Part-Time	6	12	18	21	24
<b>Total</b>	<b>12</b>	<b>24</b>	<b>36</b>	<b>39</b>	<b>42</b>

<b>Degrees Conferred Projections</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>18</b>
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CHE Code: 12-XX

Campus Code: XXXX

County: XXXX

Degree Level: XXX

CIP Code: Federal - 000000; State - 000000