The University of Georgia

University Council
Athens, Georgia 30602

January 11, 2016

UNIVERSITY CURRICULUM COMMITTEE – 2015-2016
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Dear Colleagues:

The attached proposal to change the name of the existing Center for Biodiversity and Ecosystem Processes to the Center for the Ecology of Infectious Diseases will be an agenda item for the January 15, 2016, Full University Curriculum Committee meeting.

Sincerely,

William K. Vencill

William K. Vencill, Chair
University Curriculum Committee

cc: Provost Pamela S. Whitten
Dr. Rahul Shrivastav

University of Georgia

Name Change Justification Form

School/College: Odum School of Ecology

Department: n/a

Center Name Change

Current Center Name: Center for Biodiversity and Ecosystem Processes

Proposed Center Name: Center for the Ecology of Infectious Diseases

Justification:

Enclosed is a proposal to change the name of the Center for Biodiversity to the Center for the Ecology of Infectious Diseases for consideration at the 15 January, 2016, meeting of the University Curriculum Committee. This is not a new Center proposal but rather a name change of an existing unit (Center for Biodiversity) that reflects a shift in emphasis within Odum, expanded interdisciplinary research across campus-wide Center's and Colleges focused on global infectious disease, and the departure of faculty that were directors of the Center for Biodiversity (Gowaty and Hubbell). In essence, the current Center represents the increasing importance for understanding the global origin and spread of infectious diseases via ecological mechanisms and the preeminence of this field at UGA. The Odum faculty have voted to support the Center and, as reflected by the attached letters, the dean's, director's and Vice President for Research are enthusiastically supportive.

December 10, 2015

John L. Gittleman
Dean and UGA Foundation Professor in Ecology
Odum School of Ecology

Center for the Ecology of Infectious Diseases

in the

Odum School of Ecology

at the

University of Georgia

10 December 2015

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1. Narrative statement

The science of ecology is at a turning point. Recent developments in automated experimental platforms, data acquisition, theoretical sophistication, and simulational capabilities promise to catalyze significant advances in the near future, especially with respect to a key area of strength at the University of Georgia: the ecology of infectious diseases. However, meeting current and future environmental and health challenges is proving to require an increasing emphasis on interdisciplinary research and training, particularly in areas of quantitative science. Thus, it is now widely believed among academics, health professionals, and government bodies such as the U.S. Environmental Protection Agency and U.S. Centers for Disease Control and Prevention that the ecology and evolution of infectious diseases are inextricably linked and that the primary methods for advancing these disciplines are computational. Indeed, computation is indispensable to many of what are now core scientific tasks, including dynamic modeling, statistical estimation and inference, experiment/study design, informatics/analytics, data visualization, and data mining. For this reason, the National Science Foundation has dedicated significant resources to initiatives such as the Emerging Frontiers program in the Ecology of Infectious Diseases and the National Institute for Mathematical and Biological Synthesis (www.nimbios.org), and the National Institutes of Health has created wholly new programs such as the Modeling Infectious Diseases Agent Study (MIDAS) and Research Network (www.epimodels.org). However, it is equally known that too few scientists are trained in the interdisciplinary methods of computational biology and modeling. In particular, our experiences suggest that entering graduate students have a wealth of laboratory experience, yet are rarely trained in the quantitative approaches necessary to advance scientific theory and enable inference. As a result, even students with aptitudes for quantitative methodology are generally unaware of theory, modeling, and statistics as research and career paths, despite disciplinary acceptance and an open job market. The view that there is a considerable national need for more research and training in computational biology is supported by the National Academy of Sciences, a widely-read and influential essay by National Academy member Joel E. Cohen[1], and a committee convened to assess the national need for an Institute of Mathematical Biology. All these agree that life science curricula should strive for an earlier emphasis on quantitative methods and mathematics and that mathematics and computer science are in Joel Cohen's words, “biology's next microscope, only better,” More generally, it appears that the greatest future gains in the life sciences will occur through a synthesis of quantitative and empirical approaches. We therefore propose a new *Center for the Ecology of Infectious Diseases* at the University of Georgia, which will emphasize the application and development of quantitative methods.

> **The mission of the Center for the Ecology of Infectious Diseases will be to organize and coordinate activities of students, staff scientists, and faculty to lead the University of Georgia to become a worldwide center of excellence in the instruction and research of the ecology of infectious diseases.**

Our overarching goal is to become one of the top three sites for research in ecology of infectious diseases in the world. Our approach to achieving this goal will occur in three phases:

> Phase 1: Immediate development and implementation of the Center's *core program* to promote research in topical areas on the UGA campus

1 Cohen, J.E. 2004. Mathematics is biology's next microscope, only better; Biology is mathematics's next phyics, only better. *PLOS Biology* 2:e439.

Phase 2: Development of *continuing activities* to support research activities

Phase 3: Proposal, funding, and performance of *projects*, particularly training programs targeting students, teachers, and postdoctoral scholars

Our strategy will be to expose and tap unexploited potential for synergies among existing researchers at the University of Georgia, to identify opportunities for synthesis, and to create the intellectual environment where methodological developments and novel applications flourish. We believe that the best approach to achieving this goal and executing our mission will be to develop a scholarly, university-based Center that combines the single-minded focus of a "think tank" with the timeliness of a "start-up company" in an atmosphere in which students, research scientists, and faculty freely contribute to a discourse on the dominant intellectual problems presently faced by our discipline and their technical solutions. We seek to cultivate an intellectual community where scientific curiosity is valued, rigorous solutions to the quantitative problems posed by ecology and infectious diseases are sought, and technical skills are developed and transferred to the rising generations of scientists. Our success will be evaluated according to the following goals:

- Within one year, we will begin conducting seminars and workshops designed to bring new computational techniques to the University of Georgia from outside and to develop competence among a cohort of early career scientists.
- Within two years, we will submit three major research grant applications
- Within three years, we will publish twenty peer-reviewed technical publications in the areas of disease ecology or computational methodology
- Within four years, we will submit two collaborative grant applications to develop training programs within the Center
- Within five years, we aim to make the University of Georgia a destination university for graduate students in theoretical population biology and disease ecology

Achievement of these goals will be evaluated according to attendance at workshops and seminars, production of peer-reviewed articles and other technical publications, and self-reporting by graduate student candidates and national rankings (i.e., graduate school rankings compiled by the National Research Council).

Rationale. Now is the time to organize a Center for the Ecology of Infectious Diseases. Recent developments in computer hardware/software, accelerating need for technical solutions for disease emergence and re-emergence, deployment of new systems for biosurveillance (including the National Ecological Observatory Network; http://www.neoninc.org/), and new platforms for automated acquisition of unprecedented quantities of data have created a demand for technical expertise in computational ecology. The University of Georgia is the ideal place to organize a center for the study of the ecology of infectious diseases. Of the existing American institutes devoted to the study of computational ecology and infectious disease dynamics, none is located in the Southeast (Figure 1). Of the major university departments with strength in computational ecology, only the University of California Santa Barbara has a dedicated center for researching this topic (Figure 1).

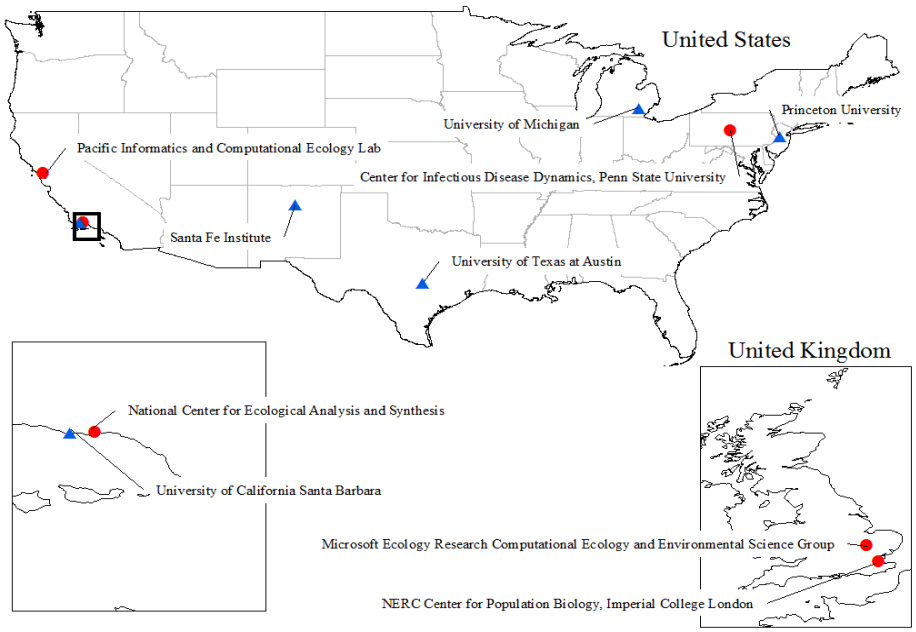


Figure 1. University departments (blue triangles) and research institutes and centers (red circles) for computational ecology and infectious disease dynamics in North American and the United Kingdom[2].

The University of Georgia boasts expertise in these areas. However, this expertise is distributed across multiple units, particularly the Odum School of Ecology and College of Veterinary Medicine, with other participants in the Franklin College of Arts and Sciences, the Warnell School of Forestry and Natural Resources, and the College of Public Health. Further, the organizing members of the Center have already demonstrated considerable success at achieving the proposed activities through the formation of the informal Computational Ecology and Epidemiology Study Group, which has been active for ~8 years. Services of the Study Group include:

- Development and maintenance of a listserv, currently serving ~85 scientists across campus
- Weekly lunch meetings
- Regular invited seminars
- Workshops
- Informal advice on computational research, grantsmanship, and professional development

Already, the portion of this group of faculty residing in the Odum School administers the *Population Biology of Infectious Diseases Research Experience for Undergraduates* summer program (with six schools and colleges involved), the *Macroecology of Infectious Diseases Research Coordination*

2 Arguably, the top two centers worldwide are Penn State (~40 faculty) and Imperial College London (~100 faculty). Due to faculty turnover and current hiring initiatives, we suggest that it is now possible to overtake Penn State in terms of reputation (even if not in terms of faculty).

Network, and a new doctoral training program in *Infectious Disease Ecology Across Scales (funded by NSF).*

Most active members of the Computational Ecology and Epidemiology Study Group are drawn from the faculties of Ecology, Veterinary Medicine, and Public Health. Further potential synergies have been identified with researchers in Franklin College (particularly Genetics, Computer Science, and Mathematics and Statistics) and Warnell, and instructors associated with the Georgia Health Sciences University/University of Georgia Medical Partnership. Much more importantly, we view the Center for the Ecology of Infectious Diseases to be complementary to the Institute of Bioinformatics and Center for Vaccines and Immunology, providing three legs of a "stool" representing, respectively,

Theory	Center for the Ecology of Infectious Diseases
Big data	Institute of Bioinformatics
Technology application and commercialization	Center for Vaccines and Immunology

This combination of Theory+Data+Technology will facilitate UGA to become the national leader in infectious disease biology. We are currently in discussions with these units to identify those activities that would be of greatest mutual benefit and represent a truly unique intellectual asset. The formation of the Center will increase our ability to forge and cement connections with these centers of talent.

A detailed description of Center activities to be rolled out in each of three phases is provided below.

Phase 1. The Center will continue the existing Computational Ecology and Epidemiology Study Group, listserv, and weekly lunch meetings. These, together with the following initiatives we are prepared to deliver immediately, will constitute the Center's *core program*:

- *Development of a seminar program to invite leading researchers in computational ecology to speak about their work to the University of Georgia community.* Such a program is desperately needed because, due to the technical and methodological nature and inherent interdisciplinarity of such topics, such presentations are often inappropriate for regular departmental seminar programs despite the fact that there is a large audience across campus.
- *Development of a workshop program to enhance skills transfer to rising scientists.* The workshop program will aim to host 3-4 workshops per year taught by a combination of Center faculty (to disseminate skills already on the UGA campus) and instructors invited to visit the University of Georgia from elsewhere (to bring new skills to the UGA campus). Such a workshop program was piloted by the Computational Ecology and Epidemiology Study Group in AY2011, supported through a grant from the President's Venture Fund to Dr. Andrew Park. Three workshops were attended by >30 scientists representing 11 UGA departments as well as guests from U.S. Environmental Protection Agency and Emory University.
- *Contribution of computational instruction to the curricular programs of participating units.* The Center will support its faculty in the development and delivery of materials to teach computational methods in undergraduate and graduate courses. Courses already supported through the intellectual exchange of the Computational Ecology and Epidemiology Study Group include cross-listed courses such as ECOL(BIOL) 4150/6150-4150L/6150L, ENTO(ECOL)(PBIO) 8150, EPID(ECOL)(IDIS) 8515, and ECOL(PBIO)(WILD) 8310,

and courses that focus specifically on quantitative methodology such FYOS 1001 and ECOL 8910. Further, the Center will actively seek to strengthen connections with the College of Public Health and the Georgia Health Sciences University/University of Georgia Medical Partnership and to identify any role for the Center to contribute to instruction in these programs.

- *Development of an international reputation for the University of Georgia in the areas of computational ecology and ecology of infectious diseases.* To advance this reputation, travel support will be provided for Center scientists and faculty to visit researchers or represent the University of Georgia at scientific gatherings overseas.

Phase 2. To these activities, we will seek to add the following initiatives within the first three years, which constitute the *continuing activities*:

- *Development of computational research support to students, research scientists, and faculty working on problems in ecology of infectious diseases.* Researchers at the University of Georgia have been provided excellent hardware resources through the Georgia Advanced Computing Resource Center; resources operated by Centers, Institutes, and departments; and resources housed within individual research labs. In our experience, these resources would be more effectively deployed if greater scientific programming support were to be made available to researchers, especially students and other early career scientists, to more efficiently utilize these resources. Initially, the Center for the Ecology of Infectious Diseases will aim to provide such support through the expertise of its faculty. Eventually we propose to develop a budget to provide salaries for two staff positions primarily responsible for assisting scientists affiliated with the Center in data analysis and visualization tasks without additional fees.
- *Grant-writing support.* The Center will support grant applications of participating faculty by providing access to data, programming support to perform preliminary analyses, structured feedback on study design and proposal writing, and narrative descriptions of research capabilities. The Center will provide support in the form of intellectual and computational resources. If approved, the following are among the applications that we envision: (1) A collaborative proposal on cross-species transmission of infectious diseases (NSF Program Solicitation NSF 13-577); (2) An application to renew funding for the ongoing and successful collaboration between the Odum School of Ecology and the New York City Department of Health and Mental Hygiene to study West Nile virus in New York City (NSF Program Solicitation NSF 13-577); (2) A new collaborative proposal with the Cary Institute of Ecosystem Studies (Millbrook, New York) for a study on the comparative biology of wildlife reservoirs of infectious diseases (NSF Program Solicitation NSF 13-577); and (4) A new application to study the ecology and evolution of hemorrhagic disease in white-tailed deer (NSF Program Solicitation NSF 13-577). Ultimately, we propose to develop a budget for a staff person to assist with these program project development activities.
- *Professional development.* The Center will develop a program to enhance the professional development of research workers, particularly postdoctoral associates and graduate students. Activities will include sharing of information, development of materials pertaining to CV development and best practices for research in theoretical biology, the development of opportunities to develop and practice interviewing skills and public

speaking, and development of programs for the improvement of technical writing. The development of well-trained technical personnel will contribute to the pool of talent at the University of Georgia. In turn, the Center will also seek to hire technical staff, therefore contributing to job creation in the state. Additionally, the Center will seek to take an active role in recruiting quantitative faculty to the departments of affiliates and mentoring junior faculty as they develop new research groups in areas of computational ecology and related fields.

- *Annual lecture.* To provide Center scientists and faculty access to the very best methodologists in computational ecology, the Center will host an annual lecture by an internationally renowned computational biologist. This lecture will be organized in such a way that students and other early career scientists are provided special opportunities to engage the speaker about their own studies.

Phase 3. Finally, pending further development of the Center and the procurement of additional funds, we envision a range of possible *projects*:

- *Development of a competitive postdoctoral fellows program.* The postdoctoral stage of career development is often one of the most intellectually productive. It also provides developing scientists an unusual opportunity to develop new skills, including computational skills. Finally, the postdoctoral stage is short (typical appointments are 1-3 years), resulting in high turnover and continuously refreshed pool of talent. For these reasons, the development of a revolving coterie of postdocs would be one of the most effective ways to advance the aims of the Center. It is our experience that the very best postdoctoral scholars are most productive when they are permitted to carry out a research program of their own design and often are best recruited through a competitive mechanism, the winners of which are provided with salary and research support.
- *Recruitment of graduate students and development of graduate student fellowships to assist students advised by participating faculty to develop novel computational solutions to problems encountered in the course of dissertation research.* Few doctoral students in our field receive their degrees on the basis of methodology. As a consequence, the development of innovative methodology is relatively disincentivized. By providing a visible concentration of expertise and sponsoring recruitment activities, the Center will assist faculty to target and recruit highly talented graduate students. At the other end of the graduate career, the Center will seek to make available fellowships, to be treated as "dissertation improvement grants," providing stipendiary support to enable doctoral students to focus on developing novel computational methodology or else providing the opportunity to take methods developed in the course of dissertation research and prepare them for dissemination.
- *Research experiences for undergraduates.* An exercise recently conducted within the Odum School of Ecology (Drake et al. unpublished) identified undergraduate instruction as one of the key opportunities for improved computational practices in ecology and evolutionary biology. To meet this need, the Center for the Ecology of Infectious Diseases will aim to support 2-3 undergraduate researchers each year, either as research assistants or to conduct independent research.
- *Research experience for high school teachers and students.* Engagement with high school teachers and students during summer recess provides an advantageous possibility for

advancing the reputation of the University of Georgia throughout the state, to provide citizens with summer employment or enrichment activities, and to advance science among high school math and computer science students. This outreach opportunity is particularly valuable to advancing theoretical biology since this sector of the population is typically unaware of career options in this area, yet already demonstrating aptitude. Faculty associated with the Center have previously sponsored student and teacher research through the Young Dawgs Summer Science and Georgia Internship For Teachers (GIFT) programs. The Center for the Ecology of Infectious Diseases will seek to support affiliated faculty who wish to support such researchers by contributing to program fees or participant wages associated with these programs.

- *Sabbatical program*. Consistent with the reputation we propose to cultivate as an international destination for the ecology of infectious diseases, we will seek support to bring visiting faculty to campus for 6-12 month as sabbatical fellows.
- *Conferences and working groups*. There is currently a great need to synthesize information on a range of topics such as the population biology of arthropod-borne diseases and the role of species interactions in the maintenance of diseases. The Center for the Ecology of Infectious Diseases will seek to coordinate such synthesis projects by organizing conferences and working groups and publishing their results.

Benefits to the state of Georgia. The Center for the Ecology of Infectious Diseases will benefit the state of Georgia through:

- University-based instruction
- Development of talent/technical training for scientists at an early career stage
- Creation of technical and non-technical jobs

Additionally, many scientists to be affiliated with the Center conduct applied research on a range of environmental and public health problems afflicting the state and its residents. Examples of such research include:

- Studies of the environmental causes of epizootic hemorrhagic disease, an arthropod-borne viral disease afflicting deer throughout the state, and a close relative of bluetongue virus, a devastating disease of livestock
- Research on the dynamics of West Nile virus
- Development of models for source-tracking of bacteria in surface waters
- Development of a computer program for automated classification of bat species from acoustic recordings, to assist wildlife managers anticipating the arrival of White-nose Syndrome, an emerging infectious disease of cave-dwelling bats

Outcomes/Criteria. Envisioned outcomes of these activities and the criteria by which they will be evaluated include the following:

Outcome	Criteria
Continuation of CEESG listserv	Growth in number of recipients
Continuation of CEESG lunch program	Growth in number and diversity of attendees
Development of a seminar program	Delivery of public lectures; attendance, and evaluation by attendees
Development of a workshop program	Delivery of technical workshops; attendance, and evaluation by attendees
Contribution of computational instruction	Development of computational courses; delivery of guest lectures in courses; development of course materials
Submission of more and higher quality grant proposals; increased award rates for extra-mural funding of research	Growth in number of proposals submitted and awarded to participating faculty
Submission and award of grant applications to support training programs	Awards of grants to support Research Experiences for Undergraduates (REU) and a graduate training program in ecology of infectious diseases
Development of international reputation	International speaking engagements of participating faculty; support of international travel by faculty, research staff and students
Development of computational research support	Peer-reviewed papers, conference presentations, theses and dissertations acknowledging Center support
Professional development	Delivery of professional development programs; implementation of professional development materials; written evaluations provided to postdoctoral associates
Annual lecture	Delivery of a public lecture by scholar of international reputation; attendance and evaluation by attendees
Development of postdoctoral fellows program	Recruitment and retention of postdoctoral associates and research scientists
Development of graduate student fellowships	Support of graduate students for dissertation improvement through computational analysis; acknowledgement of Center support in peer-reviewed papers, conference presentations, theses and dissertations; submission of a proposal for a graduate training program grant
Research experiences for undergraduates	Documented independent student research; presentation of student research acknowledging Center support at annual CURO symposium; submission of a proposal for an NSF REU Site Program
Research experiences for teachers	Sponsorship of summer research experiences for teachers through the Georgia Internship For Teachers (GIFT) program

2. Operating procedures

In keeping with the University of Georgia policy to prefer the most decentralized administrative level consistent with meeting the center or institute mission, the Center for the Ecology of Infectious Diseases will be organized within the Odum School of Ecology and involve minimal bureaucratic structure. Specifically, it will consist of a director (to be appointed by the dean of the Odum School of Ecology); associated faculty members, including postdoctoral associates; and student/staff members. Although the Center for the Ecology of Infectious Diseases will be organized within the Odum School of Ecology, any interested faculty member (including adjunct appointments), staff person, or student associated with the University of Georgia will be eligible to apply for membership. An advisory committee comprised of four elected members of the Center will meet annually to evaluate Center objectives. Membership in the Center will be determined by majority vote of this committee plus the Director and will be contingent on regular participation in the Center for the Ecology of Infectious Diseases. An annual retreat of all Center scientists will be sponsored for the purposes of event planning, to receive feedback from participants on Center activities and opportunities, and to conduct other Center business. The Odum School of Ecology will serve as the administrative unit of the Center. A comprehensive review of the Center will be performed every five years, beginning in Spring 2021, by a committee appointed by the dean of the Odum School of Ecology.

Amounts and source of anticipated income. To undertake its activities, the Center for the Ecology of Infectious Diseases will adopt a two-pronged business model: (1) core and continuing Center activities will be supported by an annual operating budget; (2) other activities will be designated as projects and will be supported by funds raised for each project, typically by applications to granting agencies and institutions (i.e., National Science Foundation). Particularly, applications planned to support training programs include a renewal proposal to NSF for the REU Site Program on the topic *Population Biology of Infectious Diseases* (Target submission: FY17; PI: Drake). A startup allowance of $40,000 has been provided by the University of Georgia Vice President for Research. The initial budget for operating core programs will be $30,000 per year, comprising $20,000 from the Odum School of Ecology and $10,000 from the Department of Infectious Diseases, College of Veterinary Medicine.

3. Faculty and staff necessary to initiate Center programs and maintain operations for three years

Core Center activities in the first three years will be performed by UGA faculty, research staff, and students in the course of their normal scholarly activities (see §5 **List of participating faculty**); administrative support will be provided by the Odum School of Ecology.

4. Physical resources

Research staff associated with the Center will be housed in the research groups of their faculty mentors. However, to facilitate the collaborative interactions at the core purpose of the Center for the Ecology of Infectious Diseases, this application requests consideration for a common meeting space to house the Center. This meeting space should comprise offices, a conference room, and a flexible open interior space for scientific gatherings, lectures, and working group meetings. If none can be found, space will be made available in the Ecology Building.

5. List of participating faculty

Proposed Center charter members include:

- Dr. Sonia Altizer (Associate Professor, Odum School of Ecology)
- Dr. Ana Bento (Postdoctoral Associate, Odum School of Ecology)
- Dr. Tobias Brett (Postdoctoral Associate, Odum School of Ecology)
- Dr. Chris Dibble (Postdoctoral Associate, Odum School of Ecology)
- Dr. John M. Drake (Associate Professor, Odum School of Ecology)
- Dr. Vanessa Ezenwa (Assistant Professor, Odum School of Ecology and College of Veterinary Medicine)
- Dr. Nicole Gottdenker (Assistant Professor, College of Veterinary Medicine)
- Dr. Richard Hall (Assistant Research Scientist, Odum School of Ecology and College of Veterinary Medicine)
- Dr. Andreas Handel (Assistant Professor, College of Public Health)
- Dr. Caner Kazanci (Associate Professor, Department of Mathematics and Faculty of Engineering)
- Dr. Andrew Kramer (Assistant Research Scientist, Odum School of Ecology)
- Dr. Diego Ruiz Moreno (Postdoctoral Associate, Odum School of Ecology)
- Dr. Courtney Murdock (Assistant Professor, College of Veterinary Medicine and Odum School of Ecology)
- Dr. Eamon O'Dea (Postdoctoral Associate, Odum School of Ecology)
- Dr. Andrew Park (Associate Professor, Odum School of Ecology and College of Veterinary Medicine)
- Dr. Pejman Rohani (Professor, Odum School of Ecology and College of Veterinary Medicine)
- Dr. John Paul Schmidt (Assistant Research Scientist, Odum School of Ecology)
- Dr. Patrick Stephens (Assistant Research Scientist, Odum School of Ecology)

All participating faculty will retain their appointments in their home units, and promotion, tenure, and salary decisions will be made in the home unit according to unit criteria. At present only the director is expected to draw salary (one month summer support) from its budget. As the Center expands its core activities and introduces new projects, it is anticipated that additional funds may be sought to support faculty, administrative staff, scientific computing staff, postdoctoral associates, and graduate students.

6. Degree programs

The Center for the Ecology of Infectious Diseases will not offer a degree program.

7. Letters of support

Letters of support from the following supporting units are included:

- Vice President for Research, David Lee
- Franklin College of Arts and Sciences, Dean Alan Dorsey
- College of Public Health, Dean Phillip Williams
- Warnell School of Forestry and Natural Resources, Dean Dale Greene
- College of Veterinary Medicine, Dean Sheila Allen
- Institute of Bioinformatics, Director Jessica Kissinger
- Faculty of Infectious Diseases, Director Don Harn

8. Responsibilities of any participating units

The Center for the Ecology of Infectious Diseases will receive oversight, review, administrative support, and support for development from the Odum School of Ecology. The director of the Center will report to the dean of the Odum School of Ecology.

9. Recommendations for the development of courses or degrees

This proposal makes no recommendations for development of courses or degrees.

The University of Georgia

Office of the Vice President for Research

September 10, 2015

Dr. John L. Gittleman
Dean, Odum School of Ecology
University of Georgia
Athens, GA 30602

Dear John,

I write to confirm my enthusiastic support for the proposal, developed by Dr. John Drake and colleagues, to establish the Center for the Ecology of Infectious Diseases at the University of Georgia. As you well know, the creation of this center is a logical next step in what has been a multi-year series of strategic moves by the University to build a world-class, multi-disciplinary faculty of infectious diseases. This effort, involving multiple colleges and schools, builds upon the fact that due to its legacy programs and past investments, the University is ideally positioned to be a leader in One Health – the relatively recently recognized theme of connectedness between human and animal health, and changing environmental conditions (e.g. climate change). To ensure its leadership position in this important area, UGA has invested broadly in areas such as vaccine development, disease modeling and surveillance, and host-pathogen interactions.

One of UGA's most important strengths in the area of One Health is centered in your school. Due to both previous recruitments (Drs. John Drake, Vanessa Ezenwa, etc.) and more recent ones (e.g. Dr. Pej Rohani from the University of Michigan, via the Provost's Extraordinary Hire Initiative), we now have a superb set of faculty working to model infectious disease outbreak and dissemination based on environmental circumstances (ecology). There are a number of important indicators supporting this claim, including: (1) our strength in this area has fueled increased collaboration with the CDC, which especially values this UGA expertise; (2) Drs. Drake and Rohani both participated in a recent White House meeting on forecasting infectious disease outbreaks; (3) Drs. Ezenwa and colleagues were recently awarded an NSF Research Traineeship grant – an important development for UGA, which has submitted many unsuccessful applications to this highly competitive and prestigious program (formerly known by the acronym IGERT); and (4) Dr. Drake's recent work on Ebola attracted international attention for UGA. Now is the time to build on these important developments by establishing a center that can add value to these efforts, including by promoting various multi-investigator grant proposals, engaging UGA faculty with related expertise who are located in other units, and drawing appropriate external attention to this very significant UGA strength.

To summarize, I believe this is a timely and well justified proposal. I also applaud the decision to create this center by renaming the defunct Center for Biodiversity (rather than leaving a defunct center "on the books").

Sincerely,

David Lee, Ph.D.
Vice President for Research

150 Paul D. Coverdell Center for Biomedical and Health Sciences
Athens, Georgia 30602 • Telephone 706-542-5969 • Fax 706-542-5978

1785
The University of Georgia

Franklin College of Arts and Sciences
Office of the Dean

September 14, 2015

Dean John Gittleman
Odum School of Ecology
University of Georgia
CAMPUS

Dear Dean Gittleman:

I write to support the proposed "Center for the Ecology of Infectious Diseases" to be housed in the School of Ecology. As we have discussed, the study of infectious diseases is a national research priority – with special emphasis on areas of strength at the University of Georgia such as forecasting, vaccines and big data. Given the level of national interest and UGA's excellent reputation, it is important that we continue to build these areas. Since the School of Ecology is internationally recognized for its leadership, I anticipate that the proposed Center will play a vital role in advancing this agenda. Additionally, as ecology is inherently synthetic and interdisciplinary, this center, which will emphasize the study of infectious diseases from explicitly ecological points of view, is particularly timely. I hope, therefore, that it may serve as an intellectual meeting place for the diverse approaches to infectious disease science on campus. I have been pleased to see the extent to which the core faculty have already bridged research units and we look forward to strengthening existing connections between our programs and the center as well as the chance to explore new opportunities.

Sincerely,

Alan T. Dorsey
Dean

The University of Georgia

College of Public Health
Dean's Office

September 14, 2015

John Gittleman, Ph.D.
Dean and
UGA Foundation Professor in Ecology
Room 107, Ecology Building
Athens, GA 30602

Dear Dean Gittleman,

This letter serves as documentation of my enthusiastic support for the proposed "Center for the Ecology of Infectious Diseases" to be housed in the School of Ecology. As we have discussed, the study of infectious diseases is increasing in national priority for research – with special emphasis on areas of strength at the University of Georgia like forecasting, vaccines and Big Data. Given the level of national interest and UGA's excellent reputation, it is imperative that we continue to build these areas. Since the School of Ecology is internationally recognized for its leadership, I anticipate that the proposed Center will play a vital role in advancing this agenda. Additionally, as ecology is inherently synthetic and interdisciplinary, this center, which will emphasize the study of infectious diseases from explicitly ecological points of view, is particularly timely. I hope, therefore, that it may serve as an intellectual meeting place for the multiplicity of approaches to infectious disease science on campus. I have been pleased to see the extent to which the core faculty have already bridged diverse research units and we look forward to strengthening existing connections between our programs and the center as well as the chance to explore new opportunities.

Sincerely,

Phillip L. Williams, Ph.D.
Dean

105 Spear Road • Rhodes Hall • Athens, Georgia 30602
Telephone 706-542-0939 • Fax 706-542-6730

The University of Georgia

Daniel B. Warnell School of Forestry and Natural Resources
Forestry, Fisheries and Wildlife, Water and Soil Resources
Natural Resources Recreation and Tourism
Office of the Dean

October 20, 2015

Dr. John L. Gittleman, Dean
Odum School of Ecology
University of Georgia
Athens, GA 30602

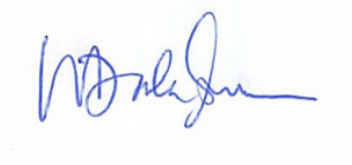
Dear Dean Gittleman,

As Dean of the Warnell School of Forestry and Natural Resources, you have my support for the establishment of a Center for the Ecology of Infectious Diseases housed in the Odum School of Ecology.

We look forward to participating in that program given our long history in Warnell of infectious disease work related to wildlife populations in collaboration with the College of Veterinary Medicine through the Southeastern Cooperative in Wildlife Disease Study.

Please contact me if I can be of further assistance.

Sincerely,



W. Dale Greene
Dean

Athens, Georgia 30602-2152
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The University of Georgia

Office of the Dean

College of Veterinary Medicine

Athens, Georgia 30602-7371
Telephone 706-542-3461
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October 9, 2015

University Curriculum Committee
Office of Curriculum Systems
CAMPUS

To Whom it May Concern:

The College of Veterinary Medicine fully supports the development of the Center for the Ecology of Infectious Diseases. Faculty within the College of Veterinary Medicine, including those listed in this proposal, will continue to work collaboratively in this important realm of research geared toward tackling some of the most pressing health threats in existence today and in the future.

Sincerely,

Sheila W. Allen, DVM, MS
Dean

SWA/tce

The University of Georgia

Department of Genetics
Institute of Bioinformatics
Center for Tropical and Emerging Global Diseases

December 10, 2015

John Gittleman
Dean, Odum School of Ecology
University of Georgia

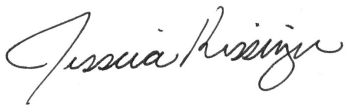
RE: Center for Ecology of Infectious Diseases proposal

Dear Dean Gittleman,

I'm writing to strongly support the proposal for a Center for the Ecology of Infectious Diseases housed in the Odum School of Ecology. The founding faculty associated with this proposal represent a world class group of ecologists and disease modelers and I expect great things from them. As Director of the Institute of Bioinformatics, I can attest to the need for greater coordination between modelers/ecologists at UGA and other quantitative biologists. I therefore fully endorse the mission and organization of the Center and anticipate it will serve a leadership role within the larger UGA research community. I look forward to working with its director, John Drake, to coordinate activities between the Institute of Bioinformatics and the Center for the Ecology of Infectious Diseases and promise my personal support. As a research scientist at UGA, I greatly welcome these developments.

Sincerely yours

Sincerely,



Jessica Kissinger, Ph.D.
Professor of Genetics
Director, Institute of Bioinformatics
Center for Tropical and Emerging Global Diseases

The University of Georgia

College of Veterinary Medicine
Department of Infectious Diseases

Donald A. Harn, Ph.D.
Professor and Georgia Research Alliance
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Dr. John Gittleman
Dean and UGA Foundation Professor in Ecology
Odum School of Ecology
University of Georgia
Athens, GA. 30602

December 10, 2015

Dear Dean Gittleman,

This letter serves to document my enthusiastic support for the proposed *Center for the Ecology of Infectious Diseases* in the Odum School of Ecology. As we have discussed, the study of infectious diseases is an issue of national priority and a research strength at the University of Georgia. The excellent faculty of the Odum School of Ecology that study and perform research in this area are internationally known for their work. Therefore it is imperative that we now provide the institutional structure that will enable its members to better coordinate their activities. Faculty and scientists associated with this Center will facilitate research campus-wide. This center neatly balances and complements the missions of the Institute of Bioinformatics and Center for Vaccines and Immunology. In particular, the Center will support and enable the activities of the Faculty of Infectious Diseases. As the incoming, new Director of FID, I welcome the leadership this Center will provide and will do all I can to support this Center as the associated faculty seek to advance their vision.

Sincerely yours

Donald A. Harn