March 10, 2008

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Graduate Student Representative – Mr. Chris Johnson

Dear Colleagues:

The attached proposal to change the Artificial Intelligence Center to the Institute for Artificial Intelligence will be an agenda item for the March 21, 2008, Full University Curriculum Committee meeting.

Sincerely,

Mr. David E. Shipley, Chair
University Curriculum Committee

cc: Dr. Arnett C. Mace, Jr.
       Professor Jere W. Morehead

Executive Committee, Benefits Committee, Committee on Facilities, Committee on Intercollegiate Athletics, Committee on Statutes, Bylaws, and Committees, Committee on Student Affairs, Curriculum Committee, Educational Affairs Committee, Faculty Admissions Committee, Faculty Affairs Committee, Faculty Grievance Committee, Faculty Post-Tenure Review Appeals Committee, Faculty/ Staff Parking Appeals Committee, Strategic Planning Committee, University Libraries Committee, University Promotion and Tenure Appeals Committee
An Equal Opportunity/Affirmative Action Institution

December 7, 2007

TO: Dean Garnett Stokes
        Franklin College of Arts and Sciences
        New College
        Campus

FROM: Walter D. Potter
        Director and Professor

SUBJECT: AI Center to Institute Proposal Highlights

In order to facilitate the clarity of the proposal requesting that the Artificial Intelligence Center be changed to the Institute for Artificial Intelligence, please find listed below some select information drawn from the proposal. Think of these items as highlights of the proposal. In addition, a highlight addressing Extramural Research Funding is included to show that indeed the Center is engaged in funded research, as well as with our MS and AB degree programs.

Please contact me if you have any questions or further suggestions. My telephone is 542-0361 and my email address is potter@uga.edu.

********** **Proposal Highlights** **********

Item #1: The change is requested to comply with the existing academic affairs policy that defines centers and institutes, Academic Affairs Policy Statement No. 7, Centers and Institutes.

Item #2: We are NOT proposing to establish a new unit. The Artificial Intelligence Center already exists, and has existed for many years. We are proposing that it be changed from a Center to an Institute.

Item #3: We are NOT proposing to establish any new degree programs. Our Master of Science in Artificial Intelligence degree program already exists (first student graduated in 1987!). Our Bachelor of Arts in Cognitive Science degree program already exists (established in the mid-1990's).

Item #4: We are NOT proposing to establish any new courses. Our unit currently manages the ARTI prefix. In addition, our unit manages numerous independent and cross-listed courses.

Item #5: We are NOT proposing that the University provide any additional funding to support our unit. Minimal funding support has been provided to our unit for many years. For this we are very grateful.

Item #6: In addition to our academic programs (see Item #3), our unit has been active in externally funded research and continues that legacy. Recent funding includes (note: dual account numbers reflect our recent move from EITS to the Franklin College of Arts and Sciences):

Account Number	Source	Amount	Start	End
10-21-RR570-047	USDA	$ 139,559.00	2/1/2001	8/31/2004
10-21-RR570-049	USDA	$ 46,000.00	3/1/2002	9/30/2005
10-21-RR782-002 or	GSK, Corp.	$ 607,922.00	5/1/2003	2/28/2006
10-21-RR570-053				
10-21-RR782-003 or	USDA	$ 48,308.00	7/1/2003	8/31/2006
10-21-RR570-054				
10-21-RR782-004 or	USDA	$ 23,060.00	7/1/2004	12/31/2006
10-21-RR570-055				
10-21-RR782-005 or	USDA	$ 20,971.00	1/1/2005	6/30/2007
10-21-RR570-056				
10-21-RR782-006	USDA	$ 60,000.00	5/1/2006	12/31/2008

Item #7: New external funding from collaborations with the UGA Violent Intranational Political Conflict and Terrorism Research Laboratory, DARPA, and Homeland Security is underway with more funding expected. In addition, Eli Lilly Corporation is reviewing a lucrative proposal.

Item #8: Our unit is very interdisciplinary in nature and has enjoyed continuing support from the departments of Philosophy, Psychology, Computer Science, and the Linguistics program. Our unit "facilitates instructional and research programs that could not reasonably be attributed to any single existing department on campus."

University of Georgia
Franklin College of Arts and Sciences

Organizational Change Proposal

Existing Organization:
Artificial Intelligence Center

Proposed Organization:
Institute for Artificial Intelligence

The University of Georgia

Organizational Change Proposal:
  Changing the Artificial Intelligence Center to the Institute for Artificial Intelligence

Institution: The University of Georgia   Date: 25 October 2007
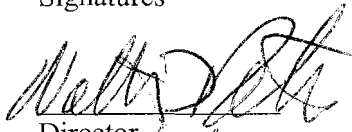
School: Franklin College of Arts and Sciences

Name of proposed organization: Institute for Artificial Intelligence
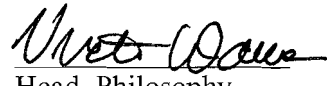
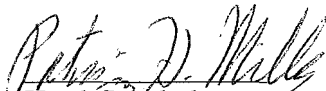**Name of existing organization**:   Artificial Intelligence Center
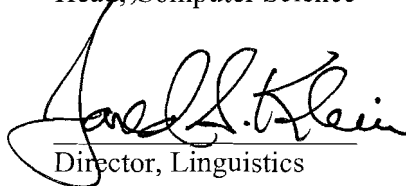
Starting Date: 1 July 2008

Signatures

Director   Head, Computer Science   Head, Philosophy
10/24/07

Head, Psychology   Director, Linguistics   Dean, Arts & Sciences

Executive Summary

The goals of the Institute for Artificial Intelligence are the same goals currently existing for the Artificial Intelligence Center. The Artificial Intelligence Center is a state-assisted Center established in 1995 to provide an administrative structure for instructional programs in Artificial Intelligence and Cognitive Science at the University, to encourage and support interdisciplinary research in Artificial Intelligence and Cognitive Science involving University faculty and staff, and to facilitate the integration of Artificial Intelligence technology by industry and government agencies in the State of Georgia and the Nation.

The Artificial Intelligence Research Group was formed as part of the Advanced Computational Methods Center in 1984. In 1987, the Board of Regents approved the Master of Science in Artificial Intelligence degree program; one of the first of its kind in the United States. These combined research and instructional programs functioned as a *de facto* Center for a few years after the ACMC was disbanded. The Artificial Intelligence Center was officially established in 1995, and continued as an organizational unit of University Computing and Network Services (UCNS, now EITS -- Enterprise Information Technology Services). Administration of the undergraduate major in Cognitive Science became fully housed in the Center in 1999.

The Center has provided a good quality masters program in Artificial Intelligence (AI) from which more than 140 students have graduated. This program attracts students from throughout the nation and, indeed, throughout the world. It has a strong placement record in industry as well as in academic (Ph.D.) programs. The undergraduate major in Cognitive Science has increased in popularity since moving to the AI Center and attracted very strong students although it is still a relatively small program (graduating 39 students since 2003 and with currently 41 declared majors – 37 enrolled fall, 2007). A number of undergraduates have moved on to the AI Master's program, and several have chosen the dual undergraduate/graduate scheme established through the Honors Program.

The Center supports and enhances AI-related research across campus. Most of the funded research in the Center during the past 17 years has been applied research, and most of this has been funded by the USDA Forest Service and GlaxoSmithKline Corporation. Currently, collaborations are being established with other organizations such as the Eli Lilly Corporation and the UGA Violent Intranational Political Conflict and Terrorism Research Laboratory (VIPCAT). As reflected in annual reports over the years, the publication record for the Center shows a broad base of basic and applied research.

The Center has enjoyed appropriate and adequate support from the University for most purposes. The Center has been successful in finding additional external funding for graduate students and to satisfy many equipment needs not satisfied by University funding.

Beginning in July 2007, the AI Center was administratively relocated from EITS to the Franklin College of Arts and Sciences.

Proposal Justification

The Artificial Intelligence Center has provided a reasonable and sufficient organizational structure to house the Artificial Intelligence and Cognitive Science degree programs for many years. However, as a Center, organizational and operational constraints limit the full potential of this important unit. To overcome these limitations, we are proposing that the Center become the Institute for Artificial Intelligence. As an aside, changing from a Center to an Institute would allow us to be more in-line with existing unit guidelines as specified by the definitions of Centers and Institutes, Academic Affairs Policy Statement No. 7.

The MS program in Artificial Intelligence and the AB program in Cognitive Science are both healthy degree programs at UGA with strong demand. The MS and AB programs are very interdisciplinary in nature, requiring students to take courses from a variety of departments including computer science, philosophy, linguistics, and psychology. The Artificial Intelligence prefix, ARTI, exists on numerous courses both solely and as cross-listings. The Center provides support for an undergraduate advisor, and a graduate coordinator as well as the IMBIA (Investigators of Mind, Brain and Intelligent Artifacts) student organization. Clearly, our existing instructional role includes the offering of credit courses and degree programs.

The Center contains an active group of 20 Faculty Fellows plus three part-time retired Faculty Fellows. Also, the Center has 7 distinguished Fellows from around the world who collaborate with Faculty Fellows on various research projects. Only one AI Faculty Fellow has the AI Center as the home department; the Associate Director who is currently a Senior Research Scientist. The other Faculty Fellows are housed across campus, from Biological and Agricultural Engineering to Psychology. Finally, in addition to providing a venue for interdisciplinary activities and supporting the academic community via undergraduate and graduate degree programs, the Center is actively focused on research. The USDA Forest Service has funded Center research for many years, a significant contract from GlaxoSmithKline Corporation has recently ended, and collaborative funded research with the University's terrorism project (VIPCAT) has just begun.

The Artificial Intelligence Center provides significant added value to the various missions of the University. The Center facilitates instructional and research programs that could not reasonably be attributed to any single existing department on campus. The instructional programs are relatively unique within the State of Georgia and the Nation, and have always been so. It is true that Georgia Tech has a very computer science oriented unit called Intelligent Systems but we have always felt the need for a more interdisciplinary approach and this has been our guiding tenet since the establishment of the MS program in 1987 (long before their Intelligent Systems unit came into existence). A more closely aligned program exists at the University of California at San Diego in their Department of Cognitive Science.

The Artificial Intelligence Center has enjoyed consistent student interest in both undergraduate and graduate degree programs since its beginnings. The field of Artificial Intelligence has grown significantly over the years and infiltrated practically all aspects of modern life. We feel that interest in Artificial Intelligence and Cognitive Science will

continue to accelerate and that demand for our degree programs will continue to grow. Other, perhaps more famous, visionaries are of the same opinion. For example, Bill Gates, founder of the Microsoft Corporation, identifies developing artificial intelligence as one of the three main technology challenges for the future. He goes on to say: "If you invent a breakthrough in artificial intelligence, so machines can learn, that is worth 10 Microsofts." Note that Machine Learning is a cornerstone of our degree programs.

When considering the pervasive influence of artificial intelligence in our every day lives, Rodney Brooks, former director of the MIT AI Laboratory and co-founder of the iRobot Corporation (manufacturing numerous commercial, military and rescue robots), has this to say: "There's this stupid myth out there that AI has failed, but AI is everywhere around you every second of the day." Several common examples of AI technology embedded in everyday life include:

- fuel efficiency management systems in cars (from fuel management to transmission management),
- airline scheduling of flights, crews, and terminal assignments,
- mainstream software that everyone uses such as Google and Microsoft Office,
- movie production, for example, in character generation and behavior,
- insurance claim and credit application management,
- dairy herd management and production optimization,
- computer management and troubleshooting (e.g., Microsoft Windows recovery),
- crop harvest scheduling (e.g., peanuts in Georgia),
- speech enabled automobile navigation systems.

The Artificial Intelligence Center is the University's "lead sled dog" in this technological arena and strives to influence the future of Artificial Intelligence and Cognitive Science. It is clear that the Center provides significant added value to the University. However, under the current organizational structure, it is restricted from achieving its full-potential added value contribution. In order to overcome this limitation, the Center needs to become an Institute. Therefore, we request that the Artificial Intelligence Center be revised to the Institute for Artificial Intelligence.

Supporting Contents

1) Operating Procedures and Policies

Institute for Artificial Intelligence

The University of Georgia

I. Mission

The Institute for Artificial Intelligence is a state-assisted Institute established to provide an administrative structure for instructional programs in Artificial Intelligence and Cognitive Science at the University, to encourage and support interdisciplinary research in Artificial Intelligence and Cognitive Science involving University faculty and staff, and to facilitate the integration of Artificial Intelligence technology by industry and government agencies in the State and the Nation.

II. Membership

There are four categories of members of the Institute: Fellows, Faculty Fellows, Industrial Partners, and Student Fellows.

A. Fellows

Any individual engaged in Artificial Intelligence research is eligible to become a Fellow of the Institute. Fellows are appointed for an initial term of up to one year by the Director of the Institute with the consent of the current Faculty Fellows. After the initial appointment period, Fellows may be reappointed by the Director for additional terms. Fellows have access to the Artificial Intelligence Laboratory and the colloquia of the Institute. Fellows may join Research Groups of the Institute.

B. Faculty Fellows

Any individual with a regular, temporary, or adjunct position at the University who has the permission of the Board of Regents to teach courses at the University is eligible to become a Faculty Fellow of the Institute. Faculty Fellows are elected for a term of three years by the current Faculty Fellows of the Institute. The Director may renew the appointments of a Faculty Fellow for additional three year terms without a new vote of the continuing Faculty Fellows provided the candidate has actively participated in the instructional program of the Institute during the previous appointment. The Faculty Fellows of the Institute establish the policies of the

instructional programs offered through the Institute for Artificial Intelligence. Faculty Fellows have all the privileges of Fellows.

Faculty Fellows are expected to teach a core course in the graduate program in artificial intelligence, a core course in the undergraduate program in cognitive science, or to serve on a thesis committee for a graduate student in artificial intelligence at least once during each three-year term. Active participation in the instructional programs of the Institute includes teaching a core AI or cognitive science course or serving on an AI thesis committee during the previous appointment. Reappointments of Faculty Fellows who are not actively participating will require a vote of the continuing Faculty Fellows.

C. Industrial Partners

An Industrial Partner is a corporate member of the Institute. Any private company or corporation is eligible to become an Industrial Partner of the Institute. Industrial Partners are appointed for a one year term by the Director. Industrial Partners may pay an annual subscription fee to the Institute. Industrial Partners do not have automatic access to the Artificial Intelligence Laboratory, nor may they join Research Groups of the Institute. However, they do have several specific privileges which include the following:
- Early recruiting access to AI graduate students
- Invitations to the Institute colloquium series
- Regular reports on Artificial Intelligence research at the Institute
- Discounts on Institute sponsored workshops
- Artificial Intelligence software and programming tools developed at the Institute

Industrial Partners also have the opportunity to enter into other arrangements with the Institute:
- Corporate graduate assistantships or internships
- Access to advanced AI computing hardware
- On-site presentation of AI workshops
- Visiting faculty or lecturers
- Collaborative research projects involving Institute Fellows

Other privileges of Industrial Partners are determined by the Director with the consent of the Fellows.

D. Student Fellows

Graduate students in good standing at other institutions may be appointed by the Director as Student Fellows of the Institute for a period of up to one year at a time. Student Fellow appointments should be reserved for persons who intend to visit the Institute for an extended period to conduct research with a resident Fellow. Application for appointment as a Student Fellow should include a proposal of the research to be undertaken, a copy of the student's transcript, a recommendation from

the student's faculty advisor at his or her home institution, and a recommendation from the resident Fellow with whom the student plans to work.

III. Advisory Committee

The Faculty Fellows in residence at the University of Georgia, together with a representative of the Dean of the College of Arts and Sciences, serve as the Advisory Committee for the Institute.

IV. Administrative Positions

The administrative positions of the Institute include a Director, an Associate Director, a Graduate Coordinator, an Undergraduate Coordinator, an Administrative Associate, Graduate Laboratory Assistants, and such other positions as needed and as permitted by funding.

A. Director

The Director reports to the Dean of the Franklin College of Arts and Sciences. The Director is appointed by the Dean of the Franklin College of Arts and Science with the advice of the Advisory Committee of the Institute. The normal length of appointment is three years. The Director must be a tenure-track member of the Faculty of the Franklin College of Arts and Science. The Director is reviewed according to the same schedule and the same procedures as those used to review Heads of academic Departments in the College. The Director maintains the lists of Student Fellows, Fellows and Faculty Fellows of the Institute. The Director supervises the Artificial Intelligence Laboratory. The Director serves as chief administrative officer for instructional programs in Artificial Intelligence and Cognitive Science, maintains the policies of these programs, and chairs regular and special meetings of the Faculty Fellows. The Director initiates and coordinates research projects in the Institute and coordinates the preparation of proposals for external funding to support these projects. The Director maintains liaison with Industrial Partners of the Institute. The Director coordinates the workshops and the colloquia of the Institute. The Director is the Editor-in-Chief of the series of Research Reports produced and distributed by the Institute. The Director coordinates the annual evaluations of the Institute staff. The Director prepares the annual report for the Institute. This report includes the annual report for instructional programs in Artificial Intelligence and Cognitive Science.

B. Associate Director

The Associate Director serves at the pleasure of the Director. The Associate Director must be a Faculty Fellow of the Institute. The specific responsibilities of the Associate Director are determined through the mutual agreement of the Director and the Associate Director. The original agreement of responsibilities is recorded in a

written memorandum when the Associate Director is appointed, and any subsequent changes are also recorded in written memoranda.

C. Graduate Coordinator

The Graduate Coordinator serves at the pleasure of the Director. The Graduate Coordinator must be a Faculty Fellow of the Institute. The specific responsibilities of the Graduate Coordinator are determined through the mutual agreement of the Director and the Graduate Coordinator. Example responsibilities include: overseeing graduate students and their progress, chairing the graduate admissions committee, being the primary contact for prospective students, participating on the curriculum committees of the Institute, identifying candidates for the Graduate Laboratory Assistantships, being the primary liaison between the Institute and the Graduate School, and other duties related to administrative interactions with graduate students.

D. Undergraduate Coordinator

The Undergraduate Coordinator serves at the pleasure of the Director. The Undergraduate Coordinator must be a Faculty Fellow of the Institute. The specific responsibilities of the Undergraduate Coordinator are determined through the mutual agreement of the Director and the Undergraduate Coordinator. Example responsibilities include: overseeing undergraduate students and their progress, advising undergraduate students, being the primary contact for prospective students, participating on the undergraduate curriculum committee of the Institute, identifying candidates for special undergraduate awards, being the primary liaison between the Institute and the Registrar, and other duties related to administrative interactions with undergraduate students.

E. Administrative Associate

The Administrative Associate is appointed by the Director to provide administrative and secretarial support for the Institute. The following people have access to the services of the Administrative Associate in the priority indicated by order: the Director; the Associate Director; the Graduate Coordinator, the Undergraduate Coordinator, Faculty Fellows, Fellows, and visiting researchers specifically designated by the Director or the Associate Director. The Administrative Associate handles administrative tasks related to payroll, expenditures, budget accounting, advisement, student file maintenance, and course set-up among others.

F. Graduate Laboratory Assistants

The Director appoints Graduate Research Assistants to serve as support staff in the Artificial Intelligence Laboratory. These are normally graduate students in the Artificial Intelligence program. The Graduate Laboratory Assistants maintain the

equipment and the software in the Artificial Intelligence Laboratory. They provide user support to all authorized users of the facility.

V. Artificial Intelligence Laboratory

The Artificial Intelligence Laboratory supports both instruction and research in Artificial Intelligence. The facilities available in the Artificial Intelligence Laboratory include specialized Artificial Intelligence workstations and standard workstations or microcomputers equipped with software specially designed for Artificial Intelligence instruction or research. Fellows and Faculty Fellows of the Institute, University students enrolled in courses or instructional programs in Artificial Intelligence, and other students approved by the Director or the Associate Director are entitled to use this facility. Anyone else who wishes to use the facility must make a written proposal to the Director. If the proposal is approved, the Director grants access to the facility for a period of up to one semester. Additional access requires a report on previous use and a new proposal.

VI. Instructional Programs

The Institute provides the administrative structure for the undergraduate major in Cognitive Science and the Master of Science program in Artificial Intelligence at the University. The Director is the chief administrative officer of these programs, and the Faculty Fellows establish the curriculum and the policies for these programs.

The existing degree program requirements for the graduate and undergraduate degrees are listed in the appendices. Note that these are existing degree requirements and are not being proposed here. Changing from a Center to an Institute (the focus of this proposal) would allow for the possibility of expanding the course offerings if the participating departments did not champion the establishment of future artificial intelligence or cognitive science related courses.

VII. Research Activities

The Institute encourages and supports interdisciplinary research in Artificial Intelligence involving University faculty and staff. It acts as a conduit for proposals to external funding agencies to support this research. It facilitates collaboration between University researchers and other academic and non-academic researchers in this country and abroad.

A. Research Groups

The research activities of the Institute are organized into working groups established by the Director. Each Fellow of the Institute should be a member of one or more of these Research Groups. Each Research Group has a Group Leader appointed by the Director. The Group Leader coordinates the activities of the Research Group and submits quarterly progress reports to the Director.

B. Commercially Sponsored Research

The policy of the Institute is to encourage agreements with private individuals or companies to perform collaborative research aimed at the production of Artificial Intelligence systems for commercial use. The Institute works with the Vice President for Research and the Office of Contracts and Grants to facilitate such arrangements.

C. Visiting Researchers

The Institute actively seeks to bring academics and non-academics engaged in quality research in Artificial Intelligence to the Institute for extended research visits. The Director extends invitations to researchers as opportunities arise and makes available to such visitors access to the Artificial Intelligence Laboratory, office space, and other support for their research during their visit.

D. Research Reports

The Institute produces and distributes one or more series of Research Reports. These subsume the earlier ACMC and AI Center Research Reports concerned with Artificial Intelligence research.

E. Colloquia

To stimulate the exchange of ideas, the Institute offers a regular colloquium series on basic and applied research in Artificial Intelligence. This series includes guest speakers, Fellows, Faculty Fellows, and graduate students in Artificial Intelligence.

VIII. Technology Integration

The Institute promotes the integration of Artificial Intelligence technology into our society through the development and distribution of Artificial Intelligence software and programming tools, the production and distribution of Research Reports, a regular colloquium series, and non-credit workshops.

IX. Evaluation of the Institute

Every three years or when requested by the Dean of the Franklin College of Arts and Sciences, the Director coordinates an internal review of the Institute, its policies, and its activities. The results of this review are included in the annual report prepared by the Director. These results include specific recommendations for terminating obsolete programs and initiating new programs in the Institute.

X. Guidelines for Appointment and Promotion of University Full-Time Research Professionals

The basic criteria and procedures for promotion of full-time research professionals are established by the University. This document describes procedures that will be followed by the Institute for Artificial Intelligence acting as the originating unit for a promotion.

1. The Candidate will initiate the promotion review by written request to the Director.
2. The Director will appoint a Review Committee which s/he will chair. The Review Committee will consist primarily of Faculty Fellows of the Institute who are full-time faculty or staff of the University holding rank higher than the Candidate. Where appropriate, the Director will appoint additional members within the Candidate's discipline from the full-time University faculty and staff holding rank higher than the Candidate.
3. The Candidate will prepare an initial vita and narrative account of accomplishments and will make publications and other relevant evidence available to the Review Committee. The Review Committee will examine this material and determine whether a full promotion review is appropriate. The decisions of the Review Committee together with the vote will be communicated to the Candidate in writing. If the decision is negative, the Review Committee will provide the Candidate with reasonably specific reasons for the decision. The Candidate will have five working days from the date s/he receives a negative decision to appeal in writing to the Director.
4. If the Review Committee recommends a full review, a list of potential outside evaluators will be determined by the Director in consultation with the Review Committee and the Candidate. The Director will ensure that at least four outside evaluations are received and that evaluations are received from at least two evaluators nominated by the candidate. The Review Committee will examine the complete record, including the outside evaluations, and vote on promotion. This decision and vote will be communicated to the Candidate in writing. The Candidate will have five working days from the date s/he receives a negative decision to appeal in writing the Director.
5. If the Review Committee recommends a full review, a full promotion dossier will be prepared and forwarded to the Vice-President for Research. If the Director supports the Candidate's promotion, the dossier will be prepared by the Director and the Candidate. Otherwise, the dossier will be prepared by another member of the Review committee who supports the promotion and the Candidate. If the Director does not approve the promotion s/he will provide a letter explaining her/his opposition and this letter will become part of the dossier.

XI. Amendments to Operating Procedures and Policies

These Operating Procedures and Policies may be amended by a majority vote of the Advisory Committee.

2) Financial Arrangements

The Center for Artificial Intelligence was a budgetary unit of EITS for many years. Beginning in July 2007, the Center was administratively relocated from EITS to the Franklin College of Arts and Sciences with its budget, space, and equipment intact. In FY2007 the budget for the Center totaled approximately $225,000. This amount is indicative of the Center's budget over the years, adjusting for routine increases of course. The Center's budget for FY2008 is approximately $249,000. Note that the increase in budget from 2007 to 2008 was the result of salary increases and a much needed reclassification.

The Center's budget goes primarily towards salary support for the Associate Director, currently a Senior Research Scientist who is the only regular Faculty Fellow whose home department is the Center, and the Administrative Associate. The Director and Graduate Coordinator have home departments outside of the Center. However, supplemental salary support for these positions is also a major part of the Center's budget. The Artificial Intelligence Laboratory is maintained, as is all other equipment in the Center, by three Graduate Research Assistants each paid on a $1/3^{rd}$ time assistantship basis from the budget. Other remaining components of the Center's budget include Travel and Operating Expense. As can be seen, salary support for the administration of the Center is by far the bulk of the budget, and has always been the major component since the Center was formalized in 1995. Specific details of the Center's salary support are:

Director – 2/9ths supplement during the summer,
Associate Director – Academic salary plus $1/9^{th}$ summer supplement,
Graduate Coordinator – $1/9^{th}$ summer supplement,
Administrative Associate – full-time salaried employee,
GRAs – one 12 month and two 9 month, $1/3^{rd}$ time assistantships

Upon approval of Institute status, this established customary budget support for the Institute for Artificial Intelligence is expected to continue from the Franklin College of Arts and Sciences indefinitely. Less permanent anticipated income to the Institute will continue to come from external grant support. Recent past grant support has come from the USDA Forest Service and the GlaxoSmithKline Corporation. Currently talks are underway for research support from the Eli Lilly Corporation and proposals are submitted regularly to other funding agencies.

(see FY2008 budget on next page)

FY-2008, Artificial Intelligence Center Budget (existing)

Research (GJ account)
  Research – Dept Admin
    Personal Services   32,376
    Fringe Benefits   5,082
    Travel   3,000
    Operating Expense   22,353
      Subtotal   62,811

Research (GR account)
  Personal Services   157,476
  Fringe Benefits   29,699
    Subtotal   187,175

    Organization Total   249,986

3) Faculty Participation

Any individual with a regular, temporary, or adjunct position at the University who has the permission of the Board of Regents to teach courses at the University is eligible to become a Faculty Fellow of the Institute. Faculty Fellows are elected for a term of three years by the current Faculty Fellows of the Institute. The Director may renew the appointments of a Faculty Fellow for additional three year terms without a new vote of the continuing Faculty Fellows provided the candidate has actively participated in the instructional program of the Institute during the previous appointment. The Faculty Fellows of the Institute establish the policies of the instructional programs offered through the Institute for Artificial Intelligence. Faculty Fellows have all the privileges of Fellows.

Faculty Fellows are expected to teach a core course in the graduate program in artificial intelligence, a core course in the undergraduate program in cognitive science, or to serve on a thesis committee for a graduate student in artificial intelligence at least once during each three-year term. Active participation in the instructional programs of the Institute includes teaching a core AI or cognitive science course or serving on an AI thesis committee during the previous appointment.   Reappointments of Faculty Fellows who are not actively participating will require a vote of the continuing Faculty Fellows.

4) Participating Faculty Fellows (short CVs included in appendices)

Dr. Walter D. Potter, **Director** (Computer Science).

Dr. Michael A. Covington, **Associate Director** (Artificial Intelligence).

Dr. Khaled Rasheed, **Graduate Coordinator** (Computer Science).

Dr. Raymond Woller, **Undergraduate Coordinator** (Philosophy).

Dr. Jay Aronson (Terry College of Business).

Dr. Suchendra Bhandarkar (Computer Science).

Dr. James Cannady (Georgia Tech Research Institute).

Dr. Charles Cross (Philosophy).

Dr. Fredric Dolezal (Linguistics).

Dr. Adam Goodie (Psychology).

Dr. Takoi Hamrita (Biological and Agricultural Engineering).

Dr. Eileen Kraemer (Computer Science).

Dr. Robert Mahan (Psychology).

Dr. Paula Schwanenflugel (Professional Studies).

Dr. Sarah Wright (Philosophy).

Dr. Pete Bettinger (Forestry)

Dr. Prashant Doshi (Computer Science)

Dr. Elena Karahanna (Terry College of Business).

Dr. Bradley Bassler (Philosophy).

Dr. Stephen Shellman (International Affairs)

Dr. Robert Burton (Philosophy, retired).
Dr. Ron McClendon (Biological and Agricultural Engineering, retired).
Dr. Donald Nute (Philosophy, retired).

5) Letters of Support

The primary departments involved with the degree programs managed by the AI Center are: Philosophy, Psychology, Linguistics, and Computer Science. Letters of support for the Institute proposal from heads of these departments are attached. They include:

Dr. Victoria Davion	Philosophy
Dr. Patricia Miller	Psychology
Dr. Jared Klein	Linguistics
Dr. Krys Kochut	Computer Science

October 18, 2007

Dean Garnett Stokes
Franklin College of arts and Sciences
Old College
Campus

Dear Garnett:

As Head of the Philosophy Department, I am delighted to write in support of changing the Artificial Intelligence Center to the Institute for Artificial Intelligence. Four of the fourteen full-time members of our department are actively involved in the center. They are Bradley Bassler, Charles B. Cross, Melissa Wright, and Ray Woller. Dr. Woller is the Undergraduate Coordinator for the Cognitive Science Major. In addition, Donald Nute, the previous Head of the Center, who is now retired, continues as a fellow. The Center has provided an excellent opportunity for collaboration between members of different disciplines within the university, and thus significantly contributes to UGA's mission to promote interdisciplinary research. The center has an excellent Masters Degree program and an excellent Cognitive Science major.

The Center is clearly ready to be upgraded to an Institute to continue promoting interdisciplinary scholarship, add additional courses, and offer additional degree programs that would benefit all participating units as well as the university as a whole.

I wholeheartedly support the Center's proposal for an upgrade. Please do not hesitate to contact me if I can be of further assistance.

Sincerely,

Victoria Davion
Head of Philosophy

October 15, 2007

Dean Garnett Stokes
Franklin College of Arts and Sciences
Old College
Campus

Dear Dean Stokes,

On behalf of the Psychology Department, I am glad to write in support of changing the Artificial Intelligence Center to the Institute for Artificial Intelligence.

The proposed Institute continues a long-standing collaboration between our two units that has enriched and complemented our department. Two of our faculty are affiliated with the AI Center. The Center is an important resource for both instruction and research for our faculty and students in cognitive psychology.

Upgrading the AI Center to Institute status also paves the way for future possibilities such as additional courses and degree programs that would be of mutual benefit to the Institute and our department. We are eager to continue to work with the Institute to further multidisciplinary and interdisciplinary research and instruction at the University.

Sincerely,

Patricia H. Miller
Professor and Department Head

October 19, 2007

Dean Garnett Stokes
Franklin College of Arts and Sciences
Old College
Campus

The Linguistics Program is glad to write in support of changing the Artificial Intelligence Center to the Institute for Artificial Intelligence.

The proposed Institute continues a long-standing collaboration and will continue to enrich and complement our program, especially in the area of computational linguistics, a field that is assuming a position of importance nationally at the present time.

Upgrading the AI Center to Institute status also paves the way for future possibilities such as additional courses and degree programs that would be of mutual benefit to the Institute and our program.

Yours sincerely,

Jared S. Klein
Director, Program in Linguistics

The University of Georgia

October 22, 2007

Dean Garnett Stokes
Franklin College of Arts and Sciences
Old College
Campus

Dear Dean Stokes:

The Computer Science Department is glad to write in support of changing the Artificial Intelligence Center to the Institute for Artificial Intelligence.

The Computer Science Department has enjoyed a long-standing collaboration with the Artificial Intelligence Center. Many of the courses required in the Master of Science in Artificial Intelligence program are offered by the Computer Science Department. In addition, several of the Computer Science faculty members have served on advisory committees of the AI graduate students. I believe that Computer Science and the Institute for Artificial Intelligence will continue this close collaboration.

Converting the AI Center to the AI Institute will enable the future growth of the Master of Science in Artificial Intelligence program, which would be of mutual benefit to the Institute and our department. Furthermore, the AI Institute will be in a great position to continue offering a high quality Cognitive Science Program, as well.

I fully support the transition of the Artificial Intelligence Center into the Institute for Artificial Intelligence.

Sincerely,

Krys J. Kochut
Professor and Head

6) Acquiring Resources

The Faculty Fellows of the Institute for Artificial Intelligence are in a unique position to prepare collaborative proposals for external, as well as internal, grant support. In the past, external grants and cooperatives have provided substantial support for many graduate students and various faculty fellows. Additionally, Center faculty fellows have been successful in their attempts at acquiring internal grant funding for special purpose instructional equipment through the Learning Technologies Grant Program. Currently, there exist several funding proposals being reviewed by both external funding agencies and internal programs. Our intention is to continue to follow this path of success by submitting grant proposals and seeking funding support from a variety of sources including funding agencies and corporate sponsorship.

7) Anticipated Additional Faculty and Staff

Currently, there are no plans to expand the existing Center staff for the Institute. Likewise, current Faculty Fellows of the Center will continue in their role within the Institute. However, should a faculty member in the UGA community wish to become a Faculty Fellow, we will follow the established procedure as outlined in the Operating Procedures and Policies statement.

8) Participating Unit Responsibilities

The Linguistics Program and the Departments of Philosophy, Computer Science and Psychology are the primary units participating in the success of the Institute for Artificial Intelligence through their routine course offerings. For many years, the AI Center has coordinated a variety of course offerings from these departments via generous cooperation among faculty and administration. This culture of cooperation is expected to continue and is, in fact, a necessary ingredient for the continued success of the graduate and undergraduate programs of the Institute for Artificial Intelligence.

9) Courses and/or Degree Programs

Both the undergraduate program in Cognitive Science and the graduate program in Artificial Intelligence are well established at UGA. Both programs were among the first of their kind within the United States when they were originally established. Listed in the appendices are the Program of Study requirements for the MS in AI, and the major degree requirements for the Cognitive Science undergraduate degree. These requirements are sufficient for the near-term continued success of the degree programs. However, in the future it may become necessary to establish new courses relevant to existing knowledge and technologies at that time. The participating departments would probably be the primary hosts for such new courses. If such courses were outside the scope of the departments participating with the Institute, being an Institute, rather than a Center, would facilitate the proposal of these new types of courses.

The scope of the participating departments may also reflect on the need to establish an independent advanced interdisciplinary graduate program at the Ph.D. level. Although not anticipated at this time, the potential need for specialized advanced training in Artificial Intelligence may become necessary to support the technological objectives of the State of Georgia and the Nation. At that time, one possible solution to providing this advanced training may be to consider a new advanced degree program offered by the Institute. This possible avenue would seem to be out of the question for a center.

10) Appendices

A1) Artificial Intelligence Graduate Curriculum (existing, not proposed)

The Program of Study shall include a minimum of 30 hours of graduate course work and 3 hours of thesis credit (ARTI 7300). Of the 30 hours of course work, at least half shall consist of courses open only to graduate students.

The following courses shall be included on the Program of Study unless specifically waived for a particular student by that student's Advisory Committee and by the Graduate Coordinator:

• PHIL/LING 6510	Deductive Systems (3 hours)
• ARTI/CSCI 6540	Symbolic Programming (3 hours)
• PHIL/CSCI 6550	Artificial Intelligence (3 hours)
• ARTI 8800	Research Seminar (1 hour)

Select

At least 20 hours must be taken from the following groups. Of the 20 hours, 14 hours must come from group A and 6 hours must come from group B.

GROUP A:

• CSCI 6560	Evolutionary Computing (4 hours)
• ARTI/CSCI 6530	Introduction to Robotics (4 hours)
• CSCI 6800	Human Computer Interaction (4 hours)
• CSCI 8050	Knowledge Based Systems (4 hours)
• ENGR/CSCI 8940	Computational Intelligence (4 hours)
• ARTI/CSCI 8950	Machine Learning (4 hours)
• LING/CSCI 8570	Natural Language Processing (4 hours)
• PHIL/CSCI 8650	Logic and Logic Programming (4 hours)
• CSCI 8820	Computer Vision and Pattern Recognition (4 hours)
• MIST 7730	Decision Support Systems (3 hours)
• FORS 8450	Advanced Forest Planning and Harvest Scheduling (3 hours)
• CSCI 4330/6330	AI and the Web (4 hours)

GROUP B:

•	LING 8150	Generative Syntax (3 hours)
•	LING/PHIL 6300	Philosophy of Language (3 hours)
•	PHIL 6310	Philosophy of Mind (3 hours)
•	PHIL 8610	Epistemology (max of 3 hours)
•	LING/PHIL 6520	Model Theory (3 hours)
•	PHIL 6530	Philosophy of Math
•	LING/PHIL 8300	Seminar in Philosophy of Language (max of 3 hours)
•	PHIL 8310	Seminar in Philosophy of Mind (max of 3 hours)
•	PHIL 8500	Seminar in Problems of Logic (max of 3 hours)
•	PSYC 6100	Cognitive Psychology (3 hours)

A2) Cognitive Science Undergraduate Curriculum (existing, not proposed)

The following represents a description of requirements specifically for the Cognitive Science Majors and does not include all of the general UGA requirements for graduation, for further information regarding these requirements, refer to the University of Georgia Bulletin.

Core Curriculum

Areas A-E:

Required courses in Area A:

| ENGL 1101 | English Composition I (3 hours) |
| ENGL 1102 | English Composition II (3 hours) |

In addition, students must take one of the following courses:

| MATH 1101 | Introduction to Mathematical Modeling (3 hours) |
| MATH 1113 (preferred) | Precalculus (3 hours) |

Preferred courses in Area C:

| LING 2100 | The Study of Language (3 hours) |
| PHIL 1000 | Introduction to Philosophy (3 hours) |

Preferred Courses in Area D:

CSCI 1210	Introduction to Computational Science (3 hours)
BIOL 1103	Basic Concepts in Biology (3 hours)
BIOL 1103L	Concepts in Biology Laboratory (1 hour)

Preferred courses in Area E:

| ANTH 1102 | Introduction to Anthropology (3 hours) |
| PSYC 1101 | Elementary Psychology (3 hours) |

Area F:

CSCI 1301-1301L	Introduction to Computing and Programming (4 hours)
LING 2100 (If not taken in Area C)	The Study of Language (3 hours)
PSYC 1101 (If not taken in Area E)	Elementary Psychology (3 hours)
PHIL2500	Symbolic Logic (3 hours)
PHIL1000 (If not taken in	Introduction to Philosophy (3 hours)

Area C)
STAT 2000   Elementary Statistics (4 hours)

Major Requirements

A Baccalaureate degree program must require at lease 21 semester hours of upper division courses in the major field and at least 39 semester hours of upper division work overall.

Required Courses (25-29 hours)

ARTI(EPSY)(PHIL)(PSYC) 3550	Introduction to Cognitive Science
CSCI(PHIL) 4550/6550 [1] or LING(ENGL) 3150	Artificial Intelligence (3 hours) or Generative Syntax (3 hours)
PSYC 4100	Cognitive Psychology (4 hours)

Choose five courses with at least two in each of two of the following four areas (not included in above):

Artificial Intelligence Foundations Area

CSCI(ARTI) 4540	Symbolic Programming (3 hours)
CSCI 2670	Introduction to Theory of Computing (4 hours)
CSCI 2720	Data Structures (4 hours)
CSCI(MATH) 2610	Discrete Mathematics for Computer Science (4 hours)
CSCI(PHIL) 4550/6550 [1]	Artificial Intelligence (3 hours)
PHIL(LING) 4510/6510 [2]	Deductive Systems (3 hours)

Philosophical Foundations Area

PHIL 3610	Theory of Knowledge (3 hours)
PHIL(LING) 4510 [2]	Deductive Systems (3 hours)
PHIL(LING) 4300	Philosophy of Language (3 hours)
PHIL 4310 [2]	Philosophy of Mind (3 hours)
PHIL(LING) 4520	Model Theory (3 hours)

Psychological Foundations Area

PSYC 4930	Systems of Psychology (3 hours)
PSYC 4110	Learning (4 hours)
PSYC 4120	Sensation and Perception (4 hours)
PSYC 4650	Cognitive Development (3 hours)

Language and Cultural Foundations Area

ANTH(LING) 4090	Cognitive Anthropology (3 hours)
ANTH(LING) 3080	Anthropology of Language (3 hours)
LING(ENGL) 3150 [1]	Generative Syntax (3 hours)

LING 3060	Phonetics and Phonology (3 hours)
LING 4690/6690 [3]	Historical Linguistics (3 hours)
LING(CMLT) 4740/6740 [3]	Discourse Analysis (3 hours)
PHIL(LING) 4300/6300 [2]	Philosophy of Language (3 hours)
PHIL(LING) 4510/6510 [2]	Deductive Systems (3 hours)
CMSD(LING) 4500	Study of Language Development (3 hours)

Major Electives

Competency in one foreign language through the third semester, chosen from: Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, Swahili (9 hours)

General Electives

Refer to College-wide requirements when selecting general electives:
Upper division (10-14 hours) Any level (11-19 hours)

Total Hours Required: 120

[1] This course may not be used both as a Required Course and to satisfy one of the five area requirements.
[2] This course may not be used to satisfy an area requirement for two different areas.
[3] This course is not included in the old degree requirements.

A3) Fellows of the Institute for Artificial Intelligence

Dr. David Billington, Associate Professor, School of Computing and Information Technology, Griffith University, Australia

Mr. Uli Bubenheimer, Senior Software Developer, Certusoft

Dr. Dov Gabbay, Professor of Computer Science, Professor of Philosophy, Augustus De Morgan Professor of Logic, King's College, London

Mr. Bill Hollingsworth, Researcher and Founder of Cynborg (Ph.D. pending)

Dr. Steven O. Kimbrough, The Wharton School, University of Pennsylvania

Dr. Bhanu Prasad, Department of Computer and Information Sciences, Florida A & M University

Dr. Mark Twery, USDA Forest Service, Burlington, VT 05402

A4) Faculty Fellows - Institute for Artificial Intelligence: Short CVs

Dr. Walter D. Potter, **Director** (Computer Science).

Dr. Michael A. Covington, **Associate Director** (Artificial Intelligence).

Dr. Khaled Rasheed, **Graduate Coordinator** (Computer Science).

Dr. Raymond Woller, **Undergraduate Coordinator** (Philosophy).

Dr. Jay Aronson (Terry College of Business).

Dr. Suchendra Bhandarkar (Computer Science).

Dr. James Cannady (Georgia Tech Research Institute).

Dr. Charles Cross (Philosophy).

Dr. Fredric Dolezal (Linguistics).

Dr. Adam Goodie (Psychology).

Dr. Takoi Hamrita (Biological and Agricultural Engineering).

Dr. Eileen Kraemer (Computer Science).

Dr. Robert Mahan (Psychology).

Dr. Paula Schwanenflugel (Professional Studies).

Dr. Sarah Wright (Philosophy).

Dr. Pete Bettinger (Forestry)

Dr. Prashant Doshi (Computer Science)

Dr. Elena Karahanna (Terry College of Business).

Dr. Bradley Bassler (Philosophy).

Dr. Stephen Shellman (International Affairs)

Dr. Robert Burton (Philosophy, retired).
Dr. Ron McClendon (Biological and Agricultural Engineering, retired).
Dr. Donald Nute (Philosophy, retired).