Renewable Bioproducts Institute (RBI) Graduate Research Fellowships
Paper Science & Engineering (PSE) Academic Program of Study
Request for Proposals

This is the Request for Proposals for RBI Fellowships beginning with the 2018-2019 academic year.

The Renewable Bioproducts Institute at Georgia Tech benefits from a substantial endowment which began in 1929 to advance the forest products industry through leadership development and graduate research that addresses current/future needs of this industry. The endowment over the years has produced more than 1,500 graduate scientists and a growing body of scientific research. Recently, the focus of endowment-sponsored research has broadened beyond pulp and paper exclusively to include a wider scope of research related to forest biomaterials. The research mission of the RBI includes technologies that produce chemicals, biofuels and new materials from forest raw materials, and the recently awarded fellowships have reflected this evolving portfolio.

We continue our plan to award Integrated Graduate Education and Research program (‘IGER’) fellowships, since the PSE academic program is multidisciplinary. Proposals in this category have, in general, 3 faculty and 3 PSE students from at least two different schools respectively. We desire to continue to recognize and encourage collaborative programs of study. Please see Attachment 1, page 7.

Funding Requests. Faculty wishing support for an RBI Research Fellow should submit an application form [attached and available at RBI Fellowship Funding] by 5 pm Thursday, February 15, 2018, which includes the elements listed below. Please note: The titles and abstracts will be shared in RBI communications with member companies for the purpose of gaining their support for funding the submitted projects; please be mindful of this in developing your abstract. To preserve intellectual property protection, the full proposals will not be shared beyond Georgia Tech without your express permission. Include in the application:

1. Title, Principal Investigator(s)

2. Abstract suitable for sharing with RBI member company representatives and potentially other prospective funding sources (150-word maximum). (Please note that the RBI member industry representatives are bound by a GT RBI Bylaw that protects our proposals. Nevertheless, we recommend that caution be used in preparing the proposal abstracts so as to protect confidential information.)

3. Description of the project of no more than two pages (three pages for IGER-proposals).

4. Indication of the aspect of the RBI strategic mission with which the proposal is aligned. (Select one—Pulp, Paper & Packaging; Biorefining of New Chemicals and Biofuels; Bio-Based Materials and Composites, including nanocellulose. Please see page 3 for further details about the scope of each research area.)

5. Explanation (50-word maximum) of how this research aligns with the strategic mission of RBI (found at www.RBI.GaTech.edu/About) and the mission of the PSE program:
The mission of the PSE program is to provide students with the intellectual basis to be educated citizens, to prepare them for the practice of their profession, and to advance the science and technology that form the basis of Paper Science and Engineering. The program achieves its mission through the following activities:

- By producing graduates who rise to leadership positions in the forest bioproducts and allied industries.

- By conducting research that integrates and leverages expertise within the academic units of Georgia Tech and the Renewable Bioproducts Institute to create new knowledge and new technology for the forest products and related industries.

- By educating students who recognize the global nature of paper science and engineering practice and business activities, and its value as a platform for development and application of renewable, sustainable materials from biomass.

6. A description of how your advisement of the student will incorporate elements to intrigue students in the manufacturing environment and its opportunities, and to assume a leadership role in the industry (50-word max). Examples include encouragement of involvement in industry-relevant associations; visits to manufacturing sites; internships and co-op opportunities; etc.

7. Your plans to use the RBI Fellowship as cost-share in future proposals, and the funding source(s) you plan to approach using this fellowship as cost-share. Where funding from other sources is available, partial funding should be requested. It is especially appropriate to use RBI fellowship funding as a portion of cost-share requirements on research projects aligned with the RBI strategic areas.

A fixed number of projects (depending on available funding) will be selected and announced by March 15, 2018. Our current goal is to award seven new RBI Research Fellowships (Research GRAs) beginning Fall 2018. Approved positions must be filled by qualified students during the Fall 2018 semester. Failure to recruit qualified students by that date jeopardizes the award.

Alignment of Research with Strategic Areas. We will align our funding with Georgia Tech strategic areas, with those of RBI, and with the pulp, paper and forest products industry’s expressed research priorities as described by the Alliance for Pulp and Paper Technology Innovation (APPTI—formerly Agenda 2020 Technology Alliance). RBI has several strategic thrusts in its research mission, described below. We also have the opportunity to leverage the endowment with broader initiatives across Georgia Tech. Collaborative programs, perhaps in the IGER model, are encouraged, as are programs that an industry or a consortium of industries might co-fund. An IGER project would engage approximately three faculty with three students in collaboration for a specific research objective.

The industry’s Alliance for Pulp and Paper Technology Innovation (APPTI) continues to implement research roadmaps developed in 2014-2016 and is currently pursuing a portfolio of projects in its
priority research areas, in which a technical breakthrough could be transformative for the forest products industry. We are interested in three specific areas of these roadmaps: substantially reduce carbon emissions and energy consumption (per unit output); reduce fresh water intake (per unit output) by at least 50%; and increase fiber yield in pulping through, for example, chip pretreatment and novel catalysis materials and processes. Energy reductions in concentration of spent pulping liquor and in paper drying are highlighted. Summaries of APPTI’s five areas—four in core manufacturing-related opportunities and one devoted to new revenues from biomass (focused on Cellulosic Nanomaterials) are available at https://www.appti.org/portfolio-overview.html. The complete roadmaps are available for download free of charge at https://www.appti.org/technology-roadmaps-downloads.html.

**Fellowship Topics.** Research thrusts for the academic year 2018-2019 RBI Fellowship Call for Proposals include three areas: Pulp, Paper, and Packaging (including operational excellence—cost reduction, new products, process intensification, and smart manufacturing); Biorefining of Biochemicals and Biofuels; and Bio-based Materials and Composites (including nanocellulose).

A. **Pulp, Paper, and Packaging:** Growing global population and the emerging markets to serve their needs will require vast amounts of materials for paper and packaging. Our objectives in investing this endowment include engendering faculty and student engagement in developing materials and products from sustainable, renewable forest biomass so as to enable greater yield of fiber and biochemicals from wood, reduce energy intensity in manufacturing, make more efficient use of energy and water, and facilitate substitution of petrochemical-based applications with those based on renewable forest-based materials.

Accordingly, this area includes (a) innovative manufacturing technologies and (b) applications for forest bioproducts, including pulp, paper, packaging, and tissue & hygienic products. It also includes process improvements to increase manufacturing energy and resource efficiency, printed electronics, and novel packaging and materials.

1. **New Paper/Pulp Products:** Addressing fundamental challenges in fiber engineering, surface modification, and paper physics to yield a step-change in paper/packaging product performance (parameters could include, for example, strength-to-weight ratios in kraft linerboard and medium, water/vapor barrier of packaging, box performance, or other qualities). Tissue, nonwovens, fluff pulp, and dissolving pulp fit into this category, as well as containerboard, folding carton, printing & writing papers, graphic papers, and other grades. Modification of fibrous structures to enable new applications and facilitate substitution of renewable raw materials for petrochemical-based materials are within scope.

2. **Breakthrough Manufacturing Technology and Process Intensification:** Breakthrough manufacturing and/or step-change manufacturing cost reduction. Specific interests are in innovative approaches for more efficient breakdown of biomass into cellulose, hemicellulose, and lignin, and in methods to increase bond strength at higher pulp lignin content (higher kappa numbers) to improve wood yield. In addition to biomass yield improvements, projects that reduce fiber cost through higher performance or enabling effective use of lower quality fiber are encouraged. Also in scope are novel sustainable paper manufacturing processes, including new or better separation technologies and applications and/or alternatives to the current power generation and kraft recovery processes, yielding significant reductions in fiber, energy, and water use. Examples of
these are concentration of solids in streams such as weak black liquor, bleach-plant and final effluent; separation of colloids, particles, and other materials from paper machine whitewater for increased process water recycling, etc.; improved paper drying technologies and equipment; examination and prevention of scaling and corrosion in closed operations or mills; and technologies leading to the dry forming of packaging and communications papers. Additional examples are incorporation of less costly raw materials into products and processes; research to facilitate more effective recycling of paper products; methods of incorporating recycled process streams into paper and other cellulose-based products so as to lower manufacturing cost or energy consumption. These areas align with manufacturing process intensification yielding energy efficiency and manufacturing cost reduction.

3. **Novel Processes and Products**: Approaches to improve process operations, reduce manufacturing costs, and improve product quality control, including big-data applications, smart manufacturing, the Internet of Things (IoT) for manufacturing. Improvements in delignification via catalysis, additives, or other measures are included. New novel products from 2D printing for electronics, 3D printing and additive manufacturing, or modification of fibrous structures to promote novel forest-based products such as in advanced packaging, novel substrates, or other applications. Development of unique recyclable polymers to impart gas or moisture barrier properties for paper and packaging are of interest.

B. **Biorefining of New Biochemicals and Biofuels**: For purposes of the RBI Endowed Fellowship Program, biorefining is broadly defined as the chemical, biological or mechanical processing of forest biomass into value-added products. We are particularly interested in research proposals that address fundamental and manufacturing challenges for future high-margin/high-volume chemical products from forest biomaterials.

1. **Biorefinery Design and Manufacturing** - Research into the design of new biorefineries and techno-economic assessments of such processes and their products. Innovative technologies resulting in manufacturing processes enabling new applications, products, or materials from renewable, sustainable forest biomass.

2. **Biochemicals** - Addressing technical challenges of manufactured forest-based biochemicals. Fundamental study and novel technology development and economic assessments for high-value chemicals, such as lignin upgrades, furan, succinic acid, aromatic chemicals from lignocellulosics, renewable binders and adhesives, and other chemicals with high value to customers.

C. **Bio-based Materials and Composites**: Addressing the scientific challenges and developing technologies for new biomaterials and composites and for enhancements to a forest-based manufacturing site’s portfolio of products.

1. **Nanocellulose Production and Application Technologies** leading to commercialization, including cellulose nanomaterial characterization, uniformity, separations/dewatering, re-dispersion, functionalization, compatibilization. Other new and novel applications with potential for substantial consumption of cellulosic nanomaterials.

2. **Biocomposite Manufacturing** - Addressing technical challenges of manufactured biocomposites and biopolymers from forest biomaterials. Applications for cellulosic nanomaterials in pulp and paper products and any other applications as well as biobased super-absorbent polymers would also fit in this category.

3. **Innovative Technologies** resulting in new applications, products, or materials from renewable, sustainable forest biomass. A non-exclusive list of new products includes biocomposites, biopolymers, novel packaging materials, coating solutions, renewable
binders and adhesives, carbon fiber, and other chemicals with high value to customers, consumers, and society.

Reference to these industry priorities will be a factor as the RBI Fellowship faculty committee, RBI member company representatives, and the executive director of RBI evaluate the relevance of proposed projects and their alignment with the strategic priorities of renewable bioproducts industries in making fellowship funding decisions.

Selection of RBI Fellowship Proposals for Funding. Faculty research proposals and abstracts prepared for sharing with industry will be reviewed through the following process:

A. Proposals may be reviewed by peer faculty. Their assessments and recommendations will be compiled by the RBI executive director.
B. The proposed project abstracts will be distributed to RBI member companies for project ranking. A compilation of responses will be prepared by the RBI executive director and shared with the Faculty Committee.
C. With these independent reviews and industry input, the Faculty Committee will recommend to the RBI executive director a ranked list of proposals for funding. The RBI executive director will finalize selection of projects for funding and will communicate the selection to the principal investigators, Georgia Tech, the RBI member companies, and the public through the RBI website and other media. The project titles and PI’s of winning projects will be announced on the RBI website.

Criteria. RBI Fellowships are to be awarded to faculty in consideration of the following criteria: (1) the strength of the research proposal, the contribution of the intended findings to the body of knowledge and to the industry, and the plausibility of success; (2) alignment with the RBI strategic areas and the pulp, paper and forest products industry’s priorities as reflected in the APPTI (formerly Agenda 2020) Roadmaps; (3) commitment to promoting students to the manufacturing environment and its challenges and opportunities and preparing them to assume leadership roles in the industry; and (4) adoption of the faculty “conditions of support” outlined below. Preference will be given to applications from faculty who are not already supervising multiple PSE Fellows.

Selection of PSE Students for the RBI Fellowships. Once a faculty research proposal has been selected, the fellowship will be awarded to a student candidate in consideration of two criteria: (1) the academic record of the student and (2) degree of alignment of the students’ research ambitions with the RBI strategic mission. The home school and the PSE Faculty Committee are to evaluate candidates by these criteria and submit recommendations to the executive director of RBI. The decision to award a fellowship to a student rests with the executive director of RBI. Students selected for funding must enroll with a PSE minor. Faculty may not transfer RBI fellowships to other students.

Terms of Awards. RBI fellowships are generally awarded for a term of up to 4 years (PhD student) or 2 years (MS student), and are subject to satisfactory progress towards the degree objective. In the case of a student’s having made prior progress toward his or her degree, the 2- or 4-year award terms may be reduced at the time of the initial GRA award. Any funds beyond the initial award term are the responsibility of the advisor.
**Conditions of Support.** As a prerequisite to receiving the RBI Fellowship, we must receive from faculty advisors a commitment to RBI and the PSE academic program. Obtaining an RBI Fellowship.

A. We require that an annual progress assessment be conducted by the faculty advisor to ensure that the PSE student is making sufficient progress. RBI retains the right to terminate support if project progress is unsatisfactory or the project scope is changed without PSE Faculty Committee and RBI approval.

B. The advisor’s annual assessment is to be provided to the executive director of RBI along with a statement (2-page maximum) from the student describing this progress. The report is due on May 31. The assessment reports will be shared with our member companies, and faculty must therefore be mindful of intellectual property considerations when preparing the assessment reports. The form for this report can be found at Obtaining an RBI Fellowship.

C. We expect RBI Fellows to participate in periodic GT-RBI industry meetings and provide posters and presentations reporting research accomplishments.

D. Students receiving support must complete the 4-course requirements of the Paper Science & Engineering program required for PSE minors by the end of their second year of support.

E. Students must be enrolled full-time to remain eligible for an RBI Graduate Research Fellowship. Internships may be accommodated with the advisor’s recommendation and RBI executive director approval. Please note that our industry partners as well as the external review team of our 2016 Academic Program Review have highly recommended that PSE students gain intern or co-op experience.

F. We expect acknowledgement of RBI support in publications (e.g., in the acknowledgement section) and inclusion of the Renewable Bioproducts Institute in the organization credits at the beginning of the paper.

**Summary:** Our interest is in developing a collaborative support system for the PSE students while delivering research results aligned with future industry needs.

**References:**

a. Agenda 2020 (now APPTI) Roadmaps, 2016 may be found here: Technology Research Roadmaps. These roadmaps may be downloaded free of charge:

   - Next-Generation Pulping
   - Reuse of Process Effluents
   - Reduce Drying Energy
   - Black Liquor Concentration
   - Cellulosic Nanomaterials

b. Summary of APPTI vision for sustainable manufacturing: APPTI Goals and Priorities - Team Summaries

“By developing and implementing advanced manufacturing technologies, THE U.S. PULP AND PAPER INDUSTRY COULD, BY 2030:

- Reduce purchased energy by 50%, saving over 500 TBtu per year
- Reduce water used per ton by 50%, reducing water discharge nationally by 480 billion gallons per year
- Develop new biobased products worth $5 billion in sales per year
- Protect 400,000 existing jobs by making 359 mills in 40 states more sustainable economically, environmentally, and socially
- Dramatically improve the life-cycle sustainability of its products

Attachments
1. Description of the Integrated Graduate Education and Research Program (IGER) at RBI
2. Instructions for preparing the Student Statement of Interest
3. PSE Course Requirements for RBI Fellows
4. RBI Fellowship Application Form
5. RBI Fellowship Students: Annual Report of Progress (due 5/31/18)
6. Fellowship Timeline, Academic Year 2018-19
Integrated Graduate Education and Research Program (IGER) at RBI

RBI Fellowships
Paper Science & Engineering Academic Program

Goal
To enable RBI to leverage its graduate fellowship program into higher impact programs with research objectives of broad scientific merit and with outcomes that can lead to intellectual property generation.

Format
RBI typically funds approximately 7-10 fellowships per year (7 are envisioned this year) which are awarded to individual investigators based on peer review. The idea of the IGER program is to take a fraction of these fellowships—say, a minimum of three—and award them to a group of faculty who will jointly supervise the students and make advances in an area of significant RBI interest that cuts across multiple disciplines. It is envisioned that one to two such groups could be funded each year on the basis of the relative quality of the IGER proposals compared to the individual project proposals.

Requirements
- Meets the stated research priorities for this year’s RBI Fellowship call for proposals
- Is comprised of a Principle Investigator group of at least three faculty who represent at least two of the disciplines (Schools) in which RBI fellowships can be awarded. One faculty member should be designated as the lead PI for purposes of communication and reporting. It is expected that all three faculty would be involved in the research supervision of all graduate fellows and in research meetings and presentations sponsored by RBI that concern the project.
- Consists of a group of graduate fellows that are enrolled in at least two of the schools that participate in the RBI fellowship program.
- Otherwise meets the requirements applicable to RBI fellowships.
Attachment 2

Instructions for Preparing the Student Statement of Interest in the PSE Program and RBI Fellowship

Process
Faculty awards for academic year 2018-19 will be announced March 15, 2018, on this website. Faculty grantees will then select students who have been admitted to one of the four schools participating in the RBI program (School of Chemical and Biomolecular Engineering; School of Materials Science; School of Mechanical Engineering; School of Chemistry and Biochemistry). Selected students applying for RBI fellowship funding must file the Statement of Interest below, also found here: [Student Application Form - RBI Fellowship Program](#) with the hiring faculty member. The application should be accompanied by a copy of the original application for admission to the student’s home school. The faculty member then forwards the form and application to Dr. Norman Marsolan, Executive Director – Renewable Bioproducts Institute. A PSE minor is required for RBI Fellowship funding, and may also be pursued independent of such funding.

Student Statement of Interest
Each student candidate should address each question with a one- or two-paragraph response.

- How is your project relevant to the forest products industry? Please frame your response in context of the APPTI Forest Products Industry roadmaps, 2016, summarized here: [Technology Research Roadmaps](#)
- How will your results impact the forest products industry, e.g. in terms of products, processes, sustainability and environmental impact?
- How will involvement in the PSE program shape your career objectives?

The RBI fellowship requires you to take two required forest biomaterials manufacturing courses and two approved electives. Elective choices can be obtained from the RBI or participating School website.
PSE Course Requirements for RBI Fellows

All students funded through an RBI Fellowship must complete 12 credits of PSE coursework. These 12 credits constitute a PSE minor. Students completing the PSE minor must file the appropriate declaration routing form with the home school as well as the RBI executive director’s office prior to graduation.

PSE Core courses (each course is 3 credit hours)

*Required of students in all home schools*

- ChBE/ME 6741 Pulp and Paper Manufacture
- ChBE/ME 8803 Emerging Technologies in Forest Bioproducts

*Two courses from the following list*

- ChBE 6232: Chemical Engineering Processes in Pulp & Paper Manufacturing
- ME 6281: Mechanics of paper forming and coating
- MSE 6406: Environmental degradation of materials
- CHEM 8833: Pulping and bleaching chemistry

Other courses may be added to this list after approval by the PSE Faculty Committee—for example: CHEM 8853-B: Biorenewable and Sustainable Chemistry

PSE Course Descriptions

**ChBE 6741 - Pulp and Paper Manufacture (Fall semester)**

The fundamentals of pulp and paper technology including unit operations involved in the sequence leading up to the headbox in a paper mill. Applications are explored and augmented by field trips and recent case studies.

3.000 Credit Hours; 3.000 Lecture Hours

**ChBE 8803 - Emerging Technologies in Forest Bioproducts (Spring semester)**

This course concerns the development and manufacturing of nontraditional products with forest bioproducts and other biomass. The course builds upon foundational knowledge in the manufacturing of forest bioproducts to analyze and assess emerging manufacturing markets. Topics include the processes needed to produce raw materials as well as materials construction and characterization. Mastery of the technical content is supported by several case studies that challenge the student to identify aspects of leadership that enable technology and/or product development.

3.000 Credit Hours; 3.000 Lecture Hours

**ChBE 6232 – Chemical Engineering Processes in Pulp & Paper Manufacturing**

The science and engineering of processes in the pulp and paper industry, including advanced bleaching processes, and chemical recovery processes. Environmental modeling and papermaking chemistry will also be covered.

3.000 Credit Hours; 3.000 Lecture Hours
ME 6281 – Mechanics of Paper Forming and Coating
Fundamentals of multiphase flow in paper forming and coating processes, and their impact on the physical properties of composite fiber structures and surface characteristics. Flow characteristics of suspensions in process components are analyzed in depth.
3.000 Credit Hours; 3.000 Lecture Hours

Chem 8833 – Pulping and Bleaching Chemistry
Fundamental chemistry associated with pulping and bleaching of wood. Includes detailed analysis of the chemical structure of wood components, the reactions of pulping and bleaching reagents with typical carbohydrate and lignin functional groups, and the factors that govern the degree of lignin vs carbohydrate degradation.
3.000 Credit Hours; 3.000 Lecture Hours

MSE 6406 - Environmental Degradation of Materials
Basic interactions of materials with their environment. Degradation of the properties of materials when exposed to different environments. Includes fundamentals of corrosion, with appropriate examples from bleach plants, boilers, paper machines, and water treatment plants.
3.000 Credit Hours; 3.000 Lecture Hours
Attachment 4

RBI Fellowship Application Form / Academic Year 2018-19

Please send to Dr. Norman Marsolan, executive director – RBI, by 5 p.m. Thursday, February 15, 2018

Project Title and Principal Investigator(s)
Name and school of principal investigator and of other faculty on the team

Abstract
Insert below an abstract (150-word maximum) suitable for sharing with RBI member company representatives and potentially with other external funding sources. Please protect confidential information.

RBI Strategic Mission addressed by this project
Check one (please see RFP page 3 for a description of the scope of each research area):
☐ Pulp, Paper & Packaging
☐ Biorefining of New Chemicals and Biofuels
☐ Biobased Materials and Composites, Including Nanocellulose

Alignment of Research with Strategic Mission
Explain why you chose the strategic area you indicated and describe the alignment of the proposed research with RBI’s strategy and the Fellowship mission. 50-word maximum. Please see the RFP, page 2, for the Fellowship mission, and click here for RBI’s vision and mission statement (www.RBI.GaTech.Edu/About).

Description of Strategies to Engage Students in manufacturing and in the industry
Explain (50-word maximum) how your advisement will intrigue the student in the manufacturing environment and its opportunities, and prepare the RBI Fellow for leadership in the industry—examples: industry-relevant association exposures; manufacturing site visits; internships; co-op opportunities; etc.

Plans to Leverage This Fellowship
a. Cost-share anticipated for future proposals—Describe how you might use this fellowship funding as cost-share for additional funding from internal or external sources, especially in relation to projects aligned with RBI strategic areas
b. Additional funding sources that could be approached

Insert Project Description here (Three-page maximum for IGER proposals; two-page maximum, all others; 10-point font or larger)

Author______________________________
Attachment 5

Paper Science and Engineering
RBI Fellowship Students – Annual Report of Progress

This form is used to document continuing satisfactory progress, a condition of RBI Fellowship funding renewal. The completed form is due on May 31 of each year. After the student and faculty advisor have signed the form, please submit it to RBI executive director Norman Marsolan (Norman.Marsolan@RBI.GaTech.edu).

Research Title______________________________________________________________

Student Name and School__________________________ Faculty Advisor(s)____________________

Objectives and milestones identified in research plan_____________________________________

________________________________________________________________________________

Milestones achieved in previous year (since June 1/last report)_____________________________

________________________________________________________________________________

________________________________________________________________________________

Highlights of student academic achievements (examples: completed coursework; passed qualifiers; proposal accepted….)_____________________________________________________________

_____________________________________________________________________________

Findings and implications of research to date (What do the results mean? How might they be useful?)

________________________________________________________________________________

________________________________________________________________________________

Publications and presentations this year (please provide detailed citations):___________________

________________________________________________________________________________

________________________________________________________________________________

Student engagement in manufacturing and the industry during this year (Examples: Attendance at conferences; visits to manufacturing or company headquarters sites; participation in poster sessions…)

________________________________________________________________________________

Would your project be enhanced by engagement of an industry mentor? Describe______________

________________________________________________________________________________

Leverage of this fellowship: Please state how this funding was used to attract additional funding, or plans to do so in the future (example: matching funds for a Federal or other grant proposal) ___________

________________________________________________________________________________

Goals for upcoming year; next steps____________________________________________________

________________________________________________________________________________

Student Signature:________________________________ Faculty Advisor Sig.:__________________
RBI Fellowship Timeline – Academic Year 2018-19

December 1, 2017
RFP Issuance. RFP, application form, and schedule are posted to the RBI website.

February 15, 2018
Faculty proposals and application forms are due to executive director by c.o.b. (c/o Dione.Morton@RBI.GaTech.edu)

February 22 (approximate)
Proposal abstracts are reviewed with member companies; shared with PSE faculty committee for evaluation and comment

February 28, 2018
Members’ rankings and PSE Faculty Committee recommendations of the proposals are due to the executive director

March 2, 2018
Decisions are made by executive director

March 6-7, 2018
March 6, 2018, Members’ Council meeting—award decisions are presented to members; March 6-7, RBI Annual Conference (award winners may be engaged as speakers at the conference or Council meeting)

March 15, 2018
Fellowship awards are announced

May 31, 2018
Annual reports are due for all current fellowship students
Members’ Council discusses the portfolio and progress during June meeting

August - September - October
Faculty recruit students to perform endowed research