PROGRAM ANNOUNCEMENT THE ARNOLD AND MABEL BECKMAN FOUNDATION Announces THE 2018 BECKMAN SCHOLARS PROGRAM

Recognizing Outstanding Undergraduate Students in Chemistry and Biological Sciences Research

OVERVIEW

The purpose of the Beckman Scholars Program is to help stimulate, encourage and support research activities by exceptionally talented, full-time undergraduate students who are pursuing their studies at accredited four-year colleges and universities located in the United States of America. These research activities shall be centered in either chemistry, biochemistry, the biological and medical sciences or some interdisciplinary combination of these subjects. Candidates for the Beckman Scholars Award must be full-time students throughout the duration of the award.

The research activities performed by Beckman Scholars shall be conducted under the guidance of a full-time, approved faculty member at the college or university receiving an award. Research activities must be performed part-time (ten hours per week) during one academic year, and full-time over two summers (ten 40-hour weeks each summer) immediately before and after the academic year research experience.

Students will be named as Beckman Scholars in the spring of their freshman through junior years at their university or college. Once selected to be a Beckman Scholar, a student will retain the funding as long as he/she continues to excel academically and his/her research work shows satisfactory progress. Beckman Scholar funds provided to any one student may not exceed two summers and one academic year. Beckman Scholar summer funds may extend through the summer following graduation.

INSTITUTIONAL CATEGORIES AND NUMBER OF AWARDS

Beckman Scholar awards are institutional (university or college) awards. Each year, the Arnold and Mabel Beckman Foundation will select a variety of universities and colleges to be invited to submit applications for the Beckman Scholars Program.

An invited university/college will be eligible for one institutional Beckman Scholar Award, which must be used over a threeyear period. Each Beckman Scholar Award may fund up to six Beckman Scholars (with funding for student and mentor stipends and travel funds and research supplies) extending over two summers and one academic year. The number of awards allocated to an institution is determined by the institution's Carnegie Classification, with awards distributed as follows:

- Doctoral Universities: Highest Research Activity (R1) will be eligible to receive up to six Beckman Scholar Awards; awards must be awarded over a three-year period with at least ONE award per year awarded and a maximum of three awards in any one of these three years.
- Doctoral Universities: Higher Research Activity (R2) will be eligible to receive up to five Beckman Scholar Awards; awards must be awarded over a three-year period with at least ONE award per year awarded and a maximum of three awards in any one of these three years.
- Doctoral Universities: Moderate Research Activity (R3), Master's Colleges & Universities: Larger Programs (M1), Medium Programs (M2), Small Programs (M3), and Baccalaureate Colleges: Arts & Sciences Focus (B1), Diverse Fields (B2) will be eligible to receive up to four Beckman Scholar Awards; awards must be awarded over a threeyear period with at least ONE award per year awarded and a maximum of two awards in any one of these three years.

The 2018 Beckman Scholar Awardee institutions will select their scholars in early 2018 and begin their first award term in the summer of 2018, followed by a second award term beginning in the summer of 2019, and a third award term in the summer of 2020. Institutions receiving the 2018 Beckman Scholars Award will not be considered for new application invitations until the 2021 program.

2018 Beckman Scholars Program: Award Cycle

Year 1 Scholars - Summer 2018 / Academic Year 2018-19 / Summer 2019

Year 2 Scholars - Summer 2019 / Academic Year 2019-20 / Summer 2020

Year 3 Scholars - Summer 2020 / Academic Year 2020-21 / Summer 2021

INSTITUTIONAL AWARDS TO THE SCHOLARS

Each Beckman Scholar will pursue an independent research project, under the auspices of an approved mentor. The amount of funding for the 2018 Beckman Scholars Program is \$26,000; \$21,000 specifically for the Scholar and \$5,000 for the Scholar's Mentor.

The following provides a breakdown of each Beckman Scholar award:

- Student Stipend <u>\$18,200;</u> per student, distributed as follows:
 - First summer \$6,800
 - Academic Year \$4,600
 - Second summer \$6,800
- Scientific Supply and Travel <u>\$2,800;</u> per student, distributed as needed to support current research activities.
- Beckman Symposium:

- Each Beckman Scholar may be invited to attend the annual Beckman Symposium in each of the two summers of their award term; a formal notification and invitation to be provided.
- Mentor Stipend <u>\$5,000</u>; distributed as needed during the associated Scholar's award term to support the following, but not limited to:
 - Scholar Mentorship Plan (SMP) Mentor to develop & support the SMP,
 - Outlining the Scholar/Mentor relationship,
 - Detailing the collaboration between scholar, mentor & mentor's lab,
 - Defining the expectations of the Beckman Scholar, including but not limited to:
 - Attendance at outside presentations/scientific symposia with the Mentor
 - Pursuit of increased undergraduate journal publication rates by the Scholar & Mentor
 - Outlining the anticipated results of the Scholar's research
 - o Mentor Travel to support attendance with Scholar at outside scientific symposia
 - Scientific Supplies related to the Scholar's research
 - Publication Fees for publishing in undergraduate and peer reviewed publications related to Scholar's research

The Arnold and Mabel Beckman Foundation does not provide for overhead or for indirect costs. Institutions may not fund additional or "matching" Beckman Scholars.

BECKMAN SCHOLAR CANDIDATE CRITERIA

"There is no satisfactory substitute for excellence."

– Dr. Arnold O. Beckman

The Beckman Scholars Program is a merit based award. Beckman Scholars will ultimately become prominent leaders in their scientific and professional pursuits. As such, the Foundation has set forth the following requirements of a candidate for the Beckman Scholars Program:

- Undergraduate student: chemistry, biochemistry, the biological and medical sciences or some interdisciplinary combination of these subjects.
- Must be a full-time student throughout duration of award.
- Must maintain good academic standing.

- Must be a citizen or permanent resident of the United States or its possessions.
- Articulate, well spoken.
- Strong writing skills.
- In pursuit of PhD, MD, MD/PhD; or other scientific pursuits.

Demonstrated financial need and issues of race and gender should not be a qualifying criterion in the selection of Beckman Scholars.

ANNUAL BECKMAN SYMPOSIUM

Each year the Arnold and Mabel Beckman Foundation sponsors a symposium that highlights the work of the recipients of the Beckman consortium of programs.

The Annual Beckman Symposium features:

- Scientific and poster presentations by Beckman Young Investigators, Arnold O. Beckman Postdoctoral Fellows, and Beckman Scholars completing their award term.
- Speakers from the Arnold and Mabel Beckman Foundation consortium of programs.
- A series of informal concurrent seminars on topics of special interest by leading scientists from academia, industry and national government laboratories.

The Beckman Scholar attendees are composed of newly appointed Scholars entering into their first summer of research and those Scholars who are finishing their second summer of research, completing their Beckman Scholars Award term. In addition, one Faculty Mentor from each institution <u>may</u> be invited to attend. All second summer Scholars will be asked to exhibit their current research through poster presentation and several speaking slots during the symposium may be available to scholars.

The annual symposium will be a two-evening, three-day event held at the Arnold and Mabel Beckman Center of the National Academies of Sciences and Engineering in Irvine, California. Staff at the Beckman Foundation will coordinate all arrangements and reservations for the symposium. All symposium-related travel and lodging for Beckman Scholars and Faculty Mentors will be paid for by the Arnold and Mabel Beckman Foundation. Specific details will be provided well in advance.

APPLICATION GUIDELINES

- Each institution may submit one application for consideration for an award.
- Application submission requires institutional endorsement of the Arnold and Mabel Beckman Foundation's Award Terms & Conditions (document provided through online application system).
- The application must include endorsements from the chief academic officer and the dean(s) of the College(s), School(s) or Division(s) of the participating academic unit(s), in addition to the Award Terms & Conditions endorsement.
- The applying institution will designate one contact person for communications concerning its application and award. Institutional award recipients will be responsible for administering the program as well as submitting financial reports, reports of academic standing, coordinating the submittal of scholar reports, mentor reports, and institutional reports for each term of the institutional award cycle.

NEW INSTITUTION / PAST AWARDEE STATUS

For the 2018 Beckman Scholars Program, Institutions that have not received a BSP Award since 2008 (even if they received a BSP award during 1998-2007) will be considered a New Institution for the purposes of the application and review process. When completing the application, please omit any reference and/or information related to BSP awards received in 1998-2007 (with the exception of Appendix C – Historical Beckman Scholars Report Table; for internal Foundation purposes only, see *Figure 1*). Please see below for award status definitions and associated application components.

- New Institution: An institution that has never received a BSP award.
- Historical Awardee (New Institution): An institution with past BSP awards during 1998-2007.
- Past Awardee: An institution with past BSP awards during 2008-2015.
- Historical and Past Awardee: An institution with awards that occurred between 1998-2007 AND 2008-2015.

Figure 1. New Institution / Past Awardee Status

Application	Section 6:	Section 6:	Appendix C:
Component	Institutional Progress	Beckman Scholars Report	Historical Beckman Scholars
Award Status	Report	Table	Report Table ¹
New Institutions	Do not complete –	Do not complete –	Do not complete – omit from application submission
Never previously awarded	omit from application	omit from application	
a BSP	submission	submission	
Historical Awardee (New Institution) Awarded a BSP during 1998-2007	Do not complete – omit from application submission	Do not complete – omit from application submission	Complete
Past Awardee Awarded a BSP during 2008-2015	Complete	Complete	Do not complete – omit from application submission
Historical and Past Awardee	Complete for all BSPs	Complete for all BSPs	Complete for all BSPs
Awarded a BSP during	awarded from 2008-2015	awarded from 2008-2015	awarded from 1998-2007
1998-2007 & 2008-2015	ONLY	ONLY	ONLY

¹The information provided in this section is for internal Foundation purposes only, and will not be used in application evaluation.

APPLICATION OVERVIEW

The application should be prepared either individually or jointly by the chair(s) or appropriate institutional representative(s) of the academic units of chemistry, biochemistry, biology, and/or medical sciences. In addition to the endorsement of the Arnold and Mabel Beckman Foundation's Terms & Conditions (document provided), the application submission must include:

- 1) Application Cover Letter, not to exceed one (1) typewritten page (format provided)
- 2) Institutional Endorsements Page (template provided)
- 3) Institutional Data Sheet (template provided)
- 4) Faculty Mentor Summary Data Sheet (FMSDS) (template provided)
- 5) **Proposal**, not to exceed (7) seven typewritten pages (format provided)
- 6) For former Beckman Scholars Program award recipients, awarded in 2008 or later:
 - a) **Institutional Progress Report**. A separate 2-page progress report detailing the merits of the program during the award period (format provided)
 - b) Beckman Scholars Report Table (template provided)
- 7) Appendix A; **Mentor Curriculum Vitae** for each Faculty Mentor listed in the FMSDS (template provided) (two-page max per faculty member)
- 8) Appendix B; Mentor Statements (template provided) (one-page max per faculty member)
- 9) Appendix C; Historical Beckman Scholars Report Table, for former Beckman Scholars Program award recipients awarded in 2007 or earlier (template provided)
- 10) Institutional IRS Determination Letter

Failure to provide <u>all</u> requested information will result in an automatic denial of the application.

CONFIDENTIALITY

Information and data presented in this application will be held in the strictest confidence by members of the Beckman Scholars Program Advisory Panel and representatives and personnel of the Arnold and Mabel Beckman Foundation.

APPLICATION PREPARATION

The application must be in the following order:

- 1. Application Cover Page
 - A one-page introductory statement in which the institution may feature its qualifications for the Beckman Scholars Program award, in consideration of the interests of the Program and Arnold and Mabel Beckman Foundation.

2. Institutional Endorsements

• Complete requested information.

3. Institutional Data Sheet

- Provide information as requested about the faculty, majors and graduates from each academic unit.
- If awarded, students from chemistry, biochemistry, biology, and medical sciences (broadly interpreted) and/or the participating academic units (per the Institutional Data Sheet) may be considered as Beckman Scholars.
- The academic units listed on the Institutional Data Sheet need not be associated with the faculty (home departments) included on the Faculty Mentor Summary Data Sheet.

4. Faculty Mentor Summary Data Sheet

The number of Faculty Mentors required for application consideration is dependent upon the number of Beckman Scholar awards an institution is eligible for; refer to *Figure 2* for Faculty Mentor requirement specifications.

- Only the faculty listed on the Faculty Mentor Summary Data Sheet will be eligible to serve as approved mentors for the proposed program.
- The faculty (home departments) included on the Faculty Mentor Summary Data Sheet need not be associated with the academic units listed on the Institutional Data Sheet.
- Proposed Faculty Mentor pool will be evaluated based on the quality of each Faculty Mentor.
- The Beckman Scholars Program encourages the participation of both junior, as well as more senior academics as Faculty Mentors. The Program's interpretation of the Faculty Mentor Summary Data Sheet as well as the evaluations of curriculum vitae for such faculty members, will take their junior status into consideration.

Carnegie Classification	Number of Beckman Scholars Funded If Awarded	Number of Mentors Required for Application Consideration
Doctoral Universities: Highest Research Activity (R1)	6	12 - 15
Doctoral Universities: Higher Research Activity (R2)	5	10 - 12
Doctoral Universities: Moderate Research Activity (R3), Master's Colleges & Universities: Larger Programs (M1), Medium Programs (M2), Small Programs (M3), and Baccalaureate Colleges: Arts & Sciences Focus (B1), Diverse Fields (B2)	4	8 - 10

Figure 2. Required Number of Mentors for 2018 BSP Application

Provide the following information for each mentor:

(Letters correspond with column headings on Faculty Mentor Summary Data Sheet; list faculty members by alpha/last name)

- a) Home **department** of Faculty Mentor: (1) = biological sciences; (2) = chemistry, biochemistry; (3) = other (specify).
- b) Total number of years in tenure-track appointment.
- c) In Spring 2017, number of **undergraduates** mentored in research project work performed in faculty member's lab(s).
- d) In Spring 2017, number of **graduate students** working on research project work performed in faculty member's lab(s).
- e) In Spring 2017, number of **post-doctoral students** working on research project work performed in faculty member's lab(s).
- f) From start of academic year 2011-2012 to the end of academic year 2015-2016(5 years), number of **undergraduates** mentored in research performed in faculty member's lab(s).
- g) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), estimated average period of **time spent by individual undergraduates** performing research in faculty member's lab(s):
 - (a) = 0 9 months; (b) = 10 18 months; (c) = 19 or more months.
- From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), total number of peerreviewed journal articles with undergraduate co-authors in research journals, already published or in press. Do not include abstracts.
- From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), total number of <u>undergraduate co-authors in research publications</u>, already published or in press. Count each student co-author only once, even if they co-author multiple publications. Do not include abstracts.
- j) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), <u>number of External</u> <u>Presentations by mentored undergraduate research students</u>. External Presentations include regional, national and international meetings.
- k) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), <u>number of Internal</u> <u>Presentations by mentored undergraduate research students</u>. Internal Presentations take place at the host institution or at a local conference. Do not include group meetings.
- I) From January 2016 December 2016, total external support awarded for faculty member's project(s). Rounded to the nearest \$1,000.
- m) From January 2012 December 2016 (5 years), <u>average total annualized external support</u> for faculty member's research project(s). Rounded to the nearest \$1,000.
- n) From January 2016 December 2016, internal support provided by home institution for faculty member's research projects (*including* faculty member's summer research salary, undergraduate student stipends, research supplies, special research instrumentation, "competitive" internal grants and <u>excluding</u> faculty member's academic year salary and utilities costs). Rounded to the nearest \$1,000.

5. <u>Proposal</u> (Please identify each section of the proposal. Not to exceed (7) seven typewritten pages.)

Include the following three sections in the program proposal. The proposal is not limited to the following sections, however, it must comply with the seven-page maximum.

Scholar Recruitment and Selection (Section I):

- Describe the proposed scholar recruitment process:
 O Announcements, faculty promotion, etc.
 - Describe the proposed scholar selection process:
 - Beckman Scholar candidacy criteria:
 - GPA minimum including rationale,
 - research experience,
 - distinguishing characteristics, etc.

Mentor Recruitment and Selection (Section II):

- Describe the mentor recruitment process:
 - Institutional, department promotion, etc.
- Describe the mentor selection process:
 - List the qualifications of a mentor
 - Selection of the mentors
 - o Describe any training provided to the mentors

Institutional Support (Section III):

- Institution's current commitment to quality undergraduate research (level of undergraduate research activity, institutional support of research operations and quality of research facilities).
- Description of a sustainability plan, unique to the institution's research climate, for maintaining "Beckman-like" excellence in undergraduate research beyond the Beckman Scholars Program that includes:
 - Building on the Program proposed herein, a framework for nurturing future undergraduate researchers in chemistry, biochemistry, the biological and medical sciences, or some interdisciplinary combination of these subjects.
- If awarded:
 - Will the institution provide any additional financial support during the program, if so please describe. (Arnold and Mabel Beckman Foundation does not allow institutions to fund "matching scholars.")
 - How will the institution's Beckman Scholars Program differentiate from other institutional programs, and how will its success be measured?

If additional information is added to the program proposal, beyond the preceding three section requirement, it must comply with the seven-page maximum.

6. <u>Previous Award Reporting</u> (For former Beckman Scholars Program award recipients, <u>awarded in 2008 or</u> <u>later</u>.)

- a. Institutional Progress Report (2-page max)
 - Summary of BSP implementation
 - Success of the BSP (identify the metrics used for measuring success)
 - How the BSP benefitted the following:
 - o Institution's undergraduate programs
 - o Students
 - o Mentors
 - If Beckman Scholar funds were returned, provide a detailed explanation.

b. Beckman Scholars Report Table

- Provide the requested information for each Beckman Scholar who was named under an institutional BSP award from 2008 or later.
 - Scholars named under institutional awards from 2007 or earlier are to be included in Appendix C
 – Historical Beckman Scholars Report Table.

7. Appendix A – <u>Mentor Curriculum Vitae</u>

- CV for each Faculty Mentor identified in the Faculty Mentor Summary Data Sheet (FMSDS) (two-page max).
- Institutions are required to submit an appropriate number of Faculty Mentors for application consideration, as outlined in Section 4. Figure 2.
- Only faculty listed on the FMSDS and included in the appendices will be eligible as approved Mentors.
- Alphabetize by Mentor last name.

Each Faculty Mentor identified in the Faculty Mentor Summary Data Sheet must include a Mentor CV, which contains the following information: (Letters correspond with sections of Mentor Curriculum Vitae template provided.)

Name and Contact Information

- A. Education / Training
- B. Professional Experience
- C. Honors and Awards
- D. Select Publications (Include <u>up to ten</u> most recent publications; underline undergraduate co-authors in publication list.)
- E. Number and names of undergraduates participating in active laboratory research in the faculty member's current research activities.
- F. Total number of undergraduate research students (UGRS) the faculty member has mentored to date. (*Past Beckman Scholars Program institutions*: Of the total UGRS, how many were Beckman Scholars?)

Each Faculty Mentor curriculum vitae may NOT exceed two-pages.

8. Appendix B – <u>Mentor Statements</u>

- To be completed by <u>each</u> Faculty Mentor identified in the Faculty Mentor Summary Data Sheet.
- Each Mentor's Mentor Statement (template provided) should be completed on its own page, not to exceed one page.
- Alphabetize by Mentor last name (to match the order of Appendix A).

Mentor Statement: Briefly describe your proposed Scholar Mentorship Plan (SMP). The proposed SMP should be reflective of how the Scholar will be mentored, not the nature of the research that is to be performed. Please include the following information:

- Proposed role for the Scholar as an undergraduate researcher in the Mentor's lab.
- Frequency and nature of the planned interactions between the Scholar and the Mentor.
- Specific plans the Mentor will employ to prepare the Scholar for graduate level research and future leadership roles in scientific research and innovation.

One Mentor Statement per page. Each Faculty Mentor's Mentor Statement may NOT exceed one-page.

9. Appendix C – Historical Beckman Scholars Report Table

- Provide the requested information for each Beckman Scholar who was named under an institutional BSP award from 2007 or earlier.
- The information provided in this section is for <u>internal</u> Foundation purposes only, and will not be considered in application evaluation.

10. Institutional IRS Determination Letter

Institution must hold, or possess equivalent to, 501(c)3 status.

"There is no satisfactory substitute for excellence."

– Dr. Arnold O. Beckman

The Foundation has the assistance and counsel of a group of distinguished faculty who serve on the Beckman Scholars Advisory Panel. Each Advisory Panel member is tasked with reviewing the applications for a merit-based program with the below criteria:

- Institution's current commitment to quality undergraduate research in chemistry, biochemistry, and biological and medical sciences, or some interdisciplinary combination of these subjects (level of undergraduate research activity, external funding for research, institutional support of research operations and quality of research facilities), and continued quality of institution's graduated baccalaureate science majors (graduate and professional programs attended, awards received, publication records).
- 2. Suitability of faculty as mentors for the Beckman Scholars (educational background, undergraduate mentor experience, external funding, refereed publications, awards and honors, scholarly accomplishments) and their mentoring philosophy as stated in Faculty Mentor's Mentor Statement.
- 3. Role of Beckman Scholar as focal point of research activities (role as scientific collaborator vs. support technician, undergraduate presentations at regional and national meetings, undergraduate co-authors of refereed publications).
- 4. Environment and interactions of Beckman Scholars with existing undergraduate educational and research activities and mentorship (plan for nurturing scholars, enrichment programs, advising and career planning, training of Scholars as potential scientific leaders).
- 5. Quality and distinctiveness of proposed Beckman Scholars Program (evaluation criteria, scholar selection process, mentor selection process, institutional commitment to program). The Beckman Scholars Program is a merit based program; issues of gender, race and financial need should not be considered contributing factors in the application process.
- 6. Sustainability of Beckman Scholars Program (measures described by institution include a long-term plan to sustain same level of undergrad research at the conclusion of BSP award cycle).

IMPORTANT: Question #7 is only for Institutions who had a Beckman Scholars Program in 2008 or later.

7. Implementation of previous Beckman Scholars Program (program success, program benefits to students and institution, accomplishments of Beckman Scholars).

SELECTION

The Beckman Scholars Advisory Panel will review and evaluate the applications and recommend approximately ten meritbased programs for funding (approximately 60 Scholars). The Board of Directors of the Arnold and Mabel Beckman Foundation will make the final determination on institutional awards. It is anticipated that private and public research, doctorate, master's and baccalaureate universities and colleges will all be represented in the final award list.

Because of the excessive administrative requirements involved, the Arnold and Mabel Beckman Foundation is unable to provide critical commentary on unsuccessful proposals.

APPLICATION SUBMISSION

Online access: <u>https://1beckmanfoundationgrants.communityforce.com/Login.aspx</u> Submission deadline: **June 15, 2017 at 5 p.m. PDT / 8 p.m. EDT**.

Incomplete applications or applications received after this time will not be considered.



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Arnold and Mabel Beckman Foundation

2018 BECKMAN SCHOLARS PROGRAM

Award Terms Acknowledgement¹

The following Terms and Conditions will be included in all awards made from this funding opportunity. The terms are not negotiable, except where indicated in the document.

By my signature, I acknowledge that I have reviewed the Terms and Conditions for receiving the award funding, and will agree to the terms therein if selected for award.

___ Accepted As-is

___ Request removal of Clauses V.J. and V.K.²

State Law reference: _____

ACKNOWLEDGEMENT

Chief Academic Officer Signature

INSTITUTION

CAO Printed Name

Date

CAO Title

¹ All ten pages with signed cover letter must be submitted to satisfy Award Terms Acknowledgement.

² Clauses V.J. and V.K. may be removed (strikethrough) from the agreement if [Institution] is prohibited by State Law from entering into such agreements, e.g. institution is a municipality or an agency of the state. The appropriate Law must be referenced when the request to remove the Clauses is submitted.



The following letter outlines the terms and conditions of the Beckman Scholars Program and sets forth the payout method of the funds. The Foundation's obligation to fund this Award shall be subject to full compliance with all the terms and conditions outlined herein and as described in the application.

NOW THEREFORE, the parties hereto agree as follows:

- I. <u>Terms and Conditions of Award</u>. Based upon [Institution]'s Carnegie Classification, the Foundation agrees to fund [Scholars Awarded] Beckman Scholars at \$26,000 per Scholar, amounting to a [\$ Award Total] award for the Beckman Scholars Program at [Institution]. The award will be disbursed as follows:
 - A. <u>Timing of Award</u>. The 2018 Beckman Scholars Program is a three-year award, requiring at least **ONE** Scholar to be named per year, and a maximum of **[Max per Year]** Scholars to be named in any one of these three years:

Year 1: Summer 2018, Academic Year 2018-19, Summer 2019

Year 2: Summer 2019, Academic Year 2019-20, Summer 2020

Year 3: Summer 2020, Academic Year 2020-21, Summer 2021

- B. <u>Payout, Purpose and Use of Award</u>. [Institution] will receive [\$ Award Total] for [Scholars Awarded] Scholars over the three-year award cycle. Yearly funding amounts will be determined by the number of Scholars selected in a given year, with Year 1 Scholars funded in May 2018, Year 2 Scholars in May 2019, and Year 3 Scholars in May 2020. The funding will apply to [Institution]'s select research students in [Participating Academic Units].
 - 1. <u>ACH or Wire Instructions</u>. Award funds will be distributed to the institution through **ACH (preferred) or wire transfer**.
 - 2. To accompany the fund transfer each year of the Award, a Funding Acknowledgment Letter for countersignature will be sent to [Institutional Contact] via email.
- C. <u>Award Allocation</u>. Subject to satisfaction of the terms of this award letter, each student named as a Beckman Scholar shall receive an award in the amount of \$26,000; \$21,000 specifically for the Scholar and \$5,000 for the Scholar's Mentor (restrictions apply, see section III.). Allocation of each Scholar's Award funds should be as follows;
 - 1. Student Stipend <u>\$18,200;</u> distributed as follows:
 - a. First Summer \$6,800
 - b. Academic Year \$4,600
 - c. Second Summer \$6,800
 - 2. Student Scientific Supply and Travel <u>\$2,800</u>; distributed as needed, to support current research activities.
 - 3. **Mentor Stipend <u>\$5,000</u>**; distributed as needed, during the associated Scholar's award term to support the following, but not limited to:



- a. Scholar Mentorship Plan (SMP); see section IV.A.4. for details
- b. Mentor Travel to support attendance with Scholar at outside scientific symposia
- c. Scientific Supplies related to the Scholar's research
- d. Publication fees for publishing in undergraduate and peer reviewed publications related to Scholar's research
- D. Program funding to any one student must extend continuously over one summer, academic year and the following summer. If a Scholar is unable to fulfill their term, the allocation of the Scholar's remaining funding, and associated Mentor stipend, will be reviewed and decided upon by the Foundation.
- E. Award funds for a given year of support may be distributed by the Foundation in one or more payments over a given year, beginning in May 2018.
- F. As a matter of policy, the Foundation does not provide funds for overhead or indirect costs.
- G. [Institution] agrees to expend the Award during the three-year Award period, solely for the purposes described in this Award letter and as indicated in the application. In the event the application is in conflict with the terms of this Award letter, [Institution] agrees to withdraw any such term and/or condition found to be inconsistent with the terms of the Award provided herein.
- II. <u>Scholars</u>. As a condition of the Award, students named Beckman Scholars are required to perform research activities part-time (ten hours per week) during one academic year, and full-time over two consecutive summers (ten 40-hour weeks each summer).
 - A. Institutions may NOT fund additional or "matching" Beckman Scholars.
 - B. Merit based award: issues of gender, race, and financial need not be considered in Scholar selection process.
 - C. Scholars must be full-time students and remain in good academic standing.
 - D. Beckman Scholars must be citizens or permanent residents of the United States or its possessions.
 - E. Scholars will pursue their independent research project under the auspices of an approved full-time faculty Mentor, as identified in the application (see Faculty Mentor Summary Data Sheet).
 - F. <u>Beckman Symposium</u>. Each Beckman Scholar may be invited to attend the annual Beckman Symposium in each of the two summers of their award term; a formal notification and invitation will be sent separately. Travel and hotel accomodations are provided by the Arnold and Mabel Beckman Foundation.



- 1. All second-summer scholars will be asked to exhibit their research through poster presentation.
 - a. Each year, several scholar speaking slots will be available during the symposium.
 - b. Scholar speakers will be nominated by a Mentor, and final selection made by the Foundation. Requests for scholar nominations with submission guidelines to be provided in advance of the symposium.
- 2. One Mentor from the Faculty Mentor pool (see Faculty Mentor Summary Data Sheet) <u>may</u> be invited to attend the Beckman Symposium each summer of the Award. The selection of [Institution]'s Mentor attendee will be requested in advance of the symposium to account for appropriate travel and hotel accommodations. It is the Foundation's preference that a different Mentor attend each summer, throughout the term of the award.
- III. <u>Mentors</u>. Responsible for the training of the Beckman Scholar, developing each into future leaders of scientific research and innovation, and imparting the foundational knowledge which is required for the pursuit of graduate level research.
 - A. Mentor selected for each Scholar MUST be from the list of approved Mentors submitted in the 2018 Beckman Scholars Program application (see Faculty Mentor Summary Data Sheet).
 - B. Mentor is to remain the Scholar's Mentor for the duration of the Scholar's term.
 - C. Mentor is to develop and support the Scholar Mentorship Plan (SMP); see section IV.A.4. for reporting details.
 - D. Mentor will receive Mentor stipend for each Scholar mentored over the course of the three-year Award. Mentor stipend funds must be used by Mentor in relation to associated Scholar's research for travel, scientific supplies, publishing in undergraduate journals, etc.
- IV. <u>**Reports.**</u> As a requirement to receiving funding, the Arnold and Mabel Beckman Foundation requires the following reports to be submitted at the following specific times for each cohort of Scholars:

Report Cycle	Year 1 Scholars	Year 2 Scholars	Year 3 Scholars
INITIAL REPORTING	May 15, 2018	May 15, 2019	May 15, 2020
FINAL REPORTING	October 15, 2019	October 15, 2020	October 15, 2021

Appropriate report templates with submission guidelines will be available through the Arnold and Mabel Beckman Foundation Online Grant Application and Reports Portal System:

https://1beckmanfoundationgrants.communityforce.com



An invitation to access the Reports Portal will be distributed in advance of submission deadlines to the Institutional Contact via email from admin@communityforce.com. *Please add this address to your email contacts to ensure accurate delivery.*

A. INITIAL REPORTING

Report Cycle	Year 1 Scholars	Year 2 Scholars	Year 3 Scholars
INITIAL REPORTING	May 15, 2018	May 15, 2019	May 15, 2020

- 1. Scholar and Mentor Selection
- 2. Scholar Transcripts
- 3. Scholar's Research Project Summary
- 4. Scholar Mentorship Plan (SMP); Mentor to develop & support the SMP:
 - a. Outlining the Scholar/Mentor relationship,
 - b. Detailing the collaboration between scholar, mentor & mentor's lab,
 - c. Defining the expectations of the Beckman Scholar, including
 - Attendance at outside presentations/scientific symposia with the Mentor
 - Pursuit of increased undergraduate journal publication rates by the Scholar & Mentor
 - d. Outlining the anticipated results of the Scholar's research

B. FINAL REPORTING

Report Cycle	Report Cycle Year 1 Scholars		Year 3 Scholars		
FINAL REPORTING	October 15, 2019	October 15, 2020	October 15, 2021		

1. Scholar Reports

- a. Report from each Beckman Scholar, submitted directly to the Foundation, independent of mentor review/revision, outlining:
 - The institution's recruitment and process of selection as a Beckman Scholar
 - Research findings and discussion of other activities under this award
 - The collaboration between the Scholar, Mentor, and Mentor's lab
 - The advantages of the Beckman Scholars Award
 - Recommendations to the Arnold and Mabel Beckman Foundation regarding improvements to the Beckman Scholars Program
 - Career and/or education plans (specify name of graduate institution, if applicable)
 - Contact information
- b. Scholar Value Statement: Describing Dr. Beckman's contribution to science and the impact of his innovations as they relate to the Scholar, their research and new discoveries.





O U N D A T I O N

2. Mentor Reports

- a. Report from each Mentor outlining his/her involvement with the program, the Scholar and the results of the Scholar Mentorship Plan.
- b. Mentor Value Statement: Describing Dr. Beckman's contribution to science and the impact of his innovations as they relate to the Mentor, their research and new discoveries.
- 3. **Institutional Report**; template to be provided
 - a. Through the submission of Institutional Reports, the Foundation will be assessing the Beckman Scholars Program and the impact it has had at the Institutional, Mentor, and Scholar levels. This reporting component of the Beckman Scholars Program will be required at the end of each award term, of the three-year award cycle (three Institutional Reports total).
- 4. **Expenditure Report**; form to be provided (one Scholar per form). All funding should be expended with NO remaining balance. However, remaining balances under \$50 will not be pursued by the Foundation.

In the case of a remaining balance over \$50:

- a. If Scholar continues enrollment at Institution, an automatic No Cost Extension will be granted through December 31st of the current year. In lieu of item *4. Expenditure Report*, the following No Cost Extension (NCE) reporting will be required;
 - i. NCE Report 1: Due October 15 (with Section B. items 1. 3.)
 - Explanation of Underspending
 - Accelerated Spend Report (to fully expend remaining funds by December 31)
 - ii. NCE Report 2: Due March 15 of following year
 - Final Expenditure Report *(use Expenditure Report form previously provided);* reflecting all expenditures through December 31
- b. <u>Special circumstances</u> (e.g. Scholar not continuing enrollment at Institution, or remaining funds at completion of No Cost Extension) will be handled on a case by case basis; where funds will either be reapplied or returned to the Foundation with Explanation of Underspending. Please contact Beckman Scholars Program Administrator, <u>bsp@beckman-foundation.org</u>, for more information.

V. <u>Miscellaneous</u>.

A. <u>Audit & Repayment</u>. The Foundation shall have the right, at any time during the term of the Award, to request an independent audit be performed of the accounts related to the Award held by [Institution]. Should the audit prove unsatisfactory in the direction of the Foundation, the Foundation has the right to terminate the Award immediately and [Institution] agrees to return all unexpended funds. The repayment of funds to the Arnold and Mabel Beckman Foundation must occur within 60 days from date of termination.



- B. <u>Allocation of Liability</u>. [Institution] hereby assumes any and all risks of personal injury and property damage attributable to its acts or the acts of its officers, employees, and agents, in the performance of its respective obligations under this agreement, including but not limited to the named Scholars and any individuals working with or under the Scholars.
- C. <u>Non-profit Organization</u>. [Institution] meets the Arnold and Mabel Beckman Foundation's requirement as a 501(c)3, or similarly qualifying, non-profit organization see IRS Determination Letter.
- D. <u>Media</u>. All media announcements regarding research supported by the Arnold and Mabel Beckman Foundation related to this award, including presentations, publications, openings, conferences, etc., must prominently acknowledge the support of the Arnold and Mabel Beckman Foundation. Copies of said publications must be sent to the Foundation within 60 days.
 - 1. <u>Social Media</u>. Announcements and updates made through social media should acknowledge the Arnold and Mabel Beckman Foundation through utilizing #BeckmanFoundation and the following social media handles:
 - a. LinkedIn & Facebook: Arnold and Mabel Beckman Foundation
 - b. Twitter: @BeckmanFdn
 - c. Instagram: @BeckmanFoundation
- E. <u>Name Recognition</u>. Recipients of the Award shall carry the name "Beckman Scholar" alone and not in conjunction with any other name. In publications and promotional materials, please refer to the Foundation as: The **Arnold and Mabel Beckman Foundation** (referring to the Beckman Foundation is not correct), and to the award as: The **Beckman Scholars Program** or the **Beckman Scholars Award**.
- F. <u>Notices</u>. Notices given under this agreement shall be in writing, and shall be served in one or more of the following methods: personally; delivered by first class registered or certified, return receipt requested U.S. mail; facsimile; or electronic mail. Notice to the Foundation shall be sent to the addresses set forth below, and notice to [Institution]'s Name shall be sent to the addresses as specified in this agreement, or other addresses as either party may specify in writing. All notices shall be effective upon receipt by the party to which notice is given, or within five (5) days following the date of mailing, whichever occurs sooner.

Arnold and Mabel Beckman Foundation

100 Academy Way Irvine, CA 92617 Phone: 949-721-2222 Fax: 949-721-2225 Beckman Scholars Program Administrator bsp@beckman-foundation.org Phone: 949-721-2228



UNDATION

- G. <u>Severability</u>. Every provision of this agreement is intended to be severable. If any term or provision hereof is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity or the legality of the remainder of this agreement.
- H. <u>Successors</u>. This agreement is not assignable. It is personal to each party hereto and is not assignable in whole or in part by any party hereto.
- Entire Agreement; Amendments. This agreement contains the entire understanding among the parties hereto and supersedes any prior understandings and agreements between them respecting the subject matter hereof. No amendment, alteration or modification of this agreement shall be binding unless in writing and signed by all of the parties hereto.
- J. <u>Prevailing Party Attorneys' Fees and Expenses¹</u>. In any action, suit or proceeding (collectively, "Action") arising from or related to this agreement, the prevailing party shall recover from the other party its reasonable attorneys' fees and expenses incurred in (or in connection with) such Action including any appeals or petitions. Recoverable expenses shall include, without limitation, discovery costs and expert witness fees.
- K. <u>Personal Jurisdiction, Forum Selection and Governing Law¹</u>. This agreement is made and entered into in Orange County, California, and the courts of the State of California shall have exclusive jurisdiction over any Action arising from or related to this agreement. Any such Action shall be filed in federal or state court located in Orange County, California. California law governs and shall be applied in all Actions arising from or related to this agreement.
- L. <u>Joint Preparation of this Agreement</u>. This agreement shall be interpreted and construed as if drafted jointly by all the parties, and no rule or law interpreting an agreement (or any provision in an agreement) against a party on the basis that such party drafted the agreement shall apply in any Action arising from or related to this agreement.
- M. <u>No Third-Party Beneficiaries</u>. This agreement is for the sole benefit of the parties. Nothing in this agreement, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature.
- N. <u>Counterpart Execution</u>. This agreement may be executed in any number of counterparts with the same effect as if all of the parties hereto had signed the same document. All counterparts shall be construed together and shall constitute one agreement.

¹Clauses V.J. and V.K. may be removed (strikethrough) from the agreement if [Institution] is prohibited by State Law from entering into such agreements, e.g. institution is a municipality or an agency of the state. The appropriate Law must be referenced when the request to remove the Clauses is submitted.



VI. Arnold O. Beckman Legacy.

"I have done more for science in general by making instruments available for thousands to use than what I could do in my laboratory by myself." - *Arnold O. Beckman, PhD*

Dr. Beckman always considered the greater good, whether it was through his scientific innovations, business dealings or personal relationships. The Arnold and Mabel Beckman Foundation holds steadfast to the directives of Dr. Beckman and his wife Mabel, his values, and the mission of the Foundation. Dr. Beckman believed strongly in reinvesting in science and research, supporting the up and coming scientists and looking for the future "Arnold Beckmans" of the world. In turn, the Foundation tasks each recipient of an Arnold and Mabel Beckman Foundation award to employ a similar "**pay it forward**" philosophy by promoting the legacy of Dr. Beckman, his values and his scientific contributions through their interactions in the scientific community and the world. Award recipients fulfill this task by serving as Dr. Arnold O. Beckman's living legacy and, as a means of continuing Dr. Beckman's mission for the sciences, recipients with demonstrated expertise in their area of research are called upon to serve on review committees and panels, lending their scientific expertise to the further development and evolution of the Programs supported by the Foundation.

Rules for Success Arnold O. Beckman, PhD

- 1. Absolute integrity at all times.
- 2. There is no satisfactory substitute for excellence.
- 3. Everything in moderation...including moderation itself.
- 4. Only by taking risks do you make progress.
- 5. Never do anything to harm others.
- 6. Never do anything for which you will be ashamed later.
- 7. Don't take yourself too seriously.





- VII. <u>Execution</u>. Institutional endorsement from the Chief Academic Officer acknowledges acceptance of the terms of the Beckman Scholars Program award. [Institution] agrees to expend the award solely for their [Scholars Awarded] selected Beckman Scholars. Any amount not expended or committed for these express purposes shall be repaid to the Arnold and Mabel Beckman Foundation.
 - A. Should [Institution] fail to comply with any of the terms noted above, funding of current awards may cease, repayment of funds will be requested and future awards to the institution will not be considered. If you have any questions pertaining to this award, please contact the Arnold and Mabel Beckman Foundation at 949-721-2228 or <u>bsp@beckman-foundation.org</u>.

Arnold and Mabel Beckman Foundation 2018 BECKMAN SCHOLARS PROGRAM

Institutional Endorsements

Prior to application submission, this form must be signed by the Chief Institutional Academic Officer, in addition to the Dean(s) from <u>each</u> of the participating academic unit(s). This endorsement indicates the following:

All information submitted to the Arnold and Mabel Beckman Foundation in this Application is accurate and true.

Chief Institutional Academic Officer:	
Name:	
Signature:	
Title:	
Dean of College/School/Division for Participating Academic Unit (1):	_
Name:	
Signature:	
Title:	
Dean of College/School/Division for Participating Academic Unit (2):	
Name:	
Signature:	
Title:	
Dean of College/School/Division for Participating Academic Unit (3):	
Name:	
Signature:	
Title:	

Applications for the 2018 Beckman Scholars Program must be submitted to the Arnold and Mabel Beckman Foundation Online Grant Application System by June 15, 2017 at 5:00 p.m. PDT / 8:00 p.m. EDT. Incomplete applications or applications received after this time will not be considered.

Arnold and Mabel Beckman Foundation 2018 BECKMAN SCHOLARS PROGRAM

Institutional Endorsements

Additional Academic Units

(Use only if necessary)

Prior to application submission, this form must be signed by the Chief Institutional Academic Officer, in addition to the Dean(s) from <u>each</u> of the participating academic unit(s). This endorsement indicates the following:

All information submitted to the Arnold and Mabel Beckman Foundation in this Application is accurate and true.

Dean of College/School/Division for Participating Academic Unit (4):	
Name:	
Signature:	
Title:	
Dean of College/School/Division for Participating Academic Unit (5):	
Signature:	
Title:	
Dean of College/School/Division for Participating Academic Unit (6):	
Signature:	
Title:	

Applications for the 2018 Beckman Scholars Program must be submitted to the Arnold and Mabel Beckman Foundation Online Grant Application System by June 15, 2017 at 5:00 p.m. PDT / 8:00 p.m. EDT. Incomplete applications or applications received after this time will not be considered.

2018 BECKMAN SCHOLARS PROGRAM APPLICATION INSTITUTIONAL DATA SHEET

Please provide the following data for each participating Academic Unit:*

DATA	ACADEMIC UNIT 1	ACADEMIC UNIT 2	ACADEMIC UNIT 3
Name of Academic Unit			
1. Academic Year 2016-17: Number of full- time, tenured/tenure-track Faculty members			
2. Academic Year 2016-17: Number of junior and senior academic majors			
3. Spring 2016: Number of baccalaureate degree graduates			
4. Spring 2017: Number of baccalaureate degree graduates			
5. Percent of Academic Unit's undergraduate s time, tenure-track faculty member in: List perce			
(a.) Summer 2016			
(b.) Fall 2016			
(c.) Spring 2017			
(d.) Summer 2017			
6. Academic Year 2016-17: Total external fund List <u>separate</u> totals: \$ in thousands (x) and numbe			
(a.) <u>all</u> research project support			
(b.) <u>specifically:</u> research instrumentation / equipment grants			
(c.) <u>specifically multi-year awards:</u> total allotment for Academic Year 2016-17 ONLY			
(d.) <u>specifically multi-year awards:</u> total funding awarded for entire term of multi-year awards listed in (c.)			
7. Estimates for number of baccalaureate degrades Report five year trend: Academic Year (AY) 2011-			
	AY 11-12 / AY 15-16	AY 11-12 / AY 15-16	AY 11-12 / AY 15-16
(a.) graduate school - science and engineering programs	/	/	/
(b.) medical schools	/	/	/
(c.) science/technology-based industry	/	/	/
(d.) other pursuits or unknown activities	/	/	/
Please complete th	he following data collection	details for your institution:	
	Start date (mm/dd/yyyy): End date (mm/dd/yyyy):		
Student tracking method:			
Office responsible for tracking and reporting data:			

*For omitted data, please include footnote with explanation.

The academic units listed on the Institutional Data Sheet need not be associated with the faculty (home departments) included on the Faculty Mentor Summary Data Sheet.

2018 BECKMAN SCHOLARS PROGRAM APPLICATION INSTITUTIONAL DATA SHEET

Please provide the following data for each participating Academic Unit:*

DATA	ACADEMIC UNIT 4	ACADEMIC UNIT 5	ACADEMIC UNIT 6
Name of Academic Unit			
1. Academic Year 2016-17: Number of full- time, tenured/tenure-track Faculty members			
2. Academic Year 2016-17: Number of junior and senior academic majors			
3. Spring 2016: Number of baccalaureate degree graduates			
4. Spring 2017: Number of baccalaureate degree graduates			
5. Percent of Academic Unit's undergraduate s time, tenure-track faculty member in: List perce			
(a.) Summer 2016			
(b.) Fall 2016			
(c.) Spring 2017			
(d.) Summer 2017			
6. Academic Year 2016-17: Total external fund List <u>separate</u> totals: \$ in thousands (x) and numbe			
(a.) <u>all</u> research project support			
(b.) <u>specifically:</u> research instrumentation / equipment grants			
(c.) <u>specifically multi-year awards:</u> total allotment for Academic Year 2016-17 ONLY			
(d.) <u>specifically multi-year awards:</u> total funding awarded for entire term of multi-year awards listed in (c.)			
7. Estimates for number of baccalaureate degrades Report five year trend: Academic Year (AY) 2011-			
	AY 11-12 / AY 15-16	AY 11-12 / AY 15-16	AY 11-12 / AY 15-16
(a.) graduate school - science and engineering programs	/	/	/
(b.) medical schools	/	/	/
(c.) science/technology-based industry	/	/	/
(d.) other pursuits or unknown activities	/	/	/
Please complete the	he following data collection	details for your institution:	
	Start date (mm/dd/yyyy): End date (mm/dd/yyyy):		
Student tracking method:			
Office responsible for tracking and reporting data:			

*For omitted data, please include footnote with explanation.

The academic units listed on the Institutional Data Sheet need not be associated with the faculty (home departments) included on the Faculty Mentor Summary Data Sheet.

2018 BECKMAN SCHOLARS PROGRAM APPLICATION FACULTY MENTOR SUMMARY DATA SHEET

Please provide the following data for each of the Faculty/Mentors listed: a Program Awardee, ONLY the faculty listed on this data sheet are eligible to participate a

d RSP Faculty Mante Scholor If salacted as a Rockm

11 00100104	as a Deckin	an Scholars	Program A	wardee, ON	LY the lacu	ity listea on	this data sh	eet are elig	ible to partic	cipate as ap	proved BSI	- Faculty I	lentors.		
Faculty Mentor Name	Department (numboold	# of Years in Tenure Track	Undergrads in Lab (Spring 2017, Sab	Grad Students in Lab	Postdocs in Lab (Spring 2017)	Undergrads (UG) 2011-20162	UG Time in Lab ³ 2011-20162	UG Journal Articles 2011-20162	UG Co-Authors 2011-20162	UG External Presentations 2011 - 2	UG Internal Presentations	External Suppose	Average	External Support Jan. 2012 - Dec. 201	Internal Support Jan. 2016 - Dec Jan.
	a.	b.	C.	d.	e.	f.	g.	h.	i.	j.	k.	l.*	m	1.*	n.*
	_														
	_														
													_		
TOTAL by column			0	0	0	0		0	0	0	0	\$-	\$	-	\$-
	Please	complete	the follow		collection (MMARY D	ATA SHEI	ET:			
Methodology used to coll	ect data:														
Office responsible tracking and reporting															

¹(1) = Biological Sciences; (2) = Chemistry, Biochemistry; (3) = Other (Specify)

²From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years)

 $^{3}(a) = 0.9$ months; (b) = 10-18 months; (c) = 19 or more months

*Rounded to the nearest \$1,000

FACULTY MENTOR SUMMARY DATA SHEET

Please do not submit this page with final application. FOR REFERENCE ONLY.

The number of Faculty Mentors required for application consideration is dependent upon the number of Beckman Scholar awards an institution is eligible for; refer to *Figure 1* for Faculty Mentor requirement specifications.

• Only the faculty listed on the Faculty Mentor Summary Data Sheet will be eligible to serve as approved mentors for the proposed program.

• The faculty (home departments) included on the Faculty Mentor Summary Data Sheet need not be associated with the academic units listed on the Institutional Data Sheet.

• Proposed Faculty Mentor pool will be evaluated based on the quality of each Faculty Mentor.

• The Beckman Scholars Program encourages the participation of both junior, as well as more senior academics as Faculty Mentors. The program's interpretation of the Faculty Mentor Summary Data Sheet as well as the evaluations of curriculum vitae for such faculty members, will take their junior status into consideration.

Carnegie Classification	Number of Beckman Scholars Funded If Awarded	Number of Mentors Required for Application Consideration
Doctoral Universities: Highest Research Activity (R1)	6	12 - 15
Doctoral Universities: Higher Research Activity (R2)	5	10 - 12
Doctoral Universities: Moderate Research Activity (R3), Master's Colleges & Universities: Larger Programs (M1), Medium Programs (M2), Small Programs (M3), and Baccalaureate Colleges: Arts & Sciences Focus (B1), Diverse Fields (B2)	4	8 - 10

Figure 1. Required Number of Mentors for 2018 BSP Application

Provide the following information for each Mentor:

(Letters correspond with column headings on Faculty Mentor Summary Data Sheet; list faculty members by alpha/last name).

a) Home **department** of Faculty Mentor: (1) = biological sciences; (2) = chemistry, biochemistry; (3) = other (specify).

b) Total number of years in tenure-track appointment.

c) In Spring 2017, number of undergraduates mentored in research project work performed in faculty member's lab(s).

d) In Spring 2017, number of graduate students working on research project work performed in faculty member's lab(s).

e) In Spring 2017, number of **post-doctoral** students working on research project work performed in faculty member's lab(s).

f) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), number of **undergraduates mentored** in research performed in faculty member's lab(s).

FACULTY MENTOR SUMMARY DATA SHEET

g) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), estimated average period of **time spent by individual undergraduates** performing research in faculty member's lab(s):

(a) = 0 - 9 months; (b) = 10 - 18 months; (c) = 19 or more months.

h) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), total number of peerreviewed journal articles with undergraduate co-authors in research journals, already published or in press. Do not include abstracts.

i) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), <u>total number of</u> <u>undergraduate co-authors in research publications, already published or in press.</u> Count each student co-author only once, even if they co-author multiple publications. Do not include abstracts.

j) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), <u>number of External</u> <u>Presentations</u> by mentored undergraduate research students. External Presentations include regional, national and international meetings.

k) From start of academic year 2011-2012 to the end of academic year 2015-2016 (5 years), <u>number of Internal</u> <u>Presentations by mentored undergraduate research students</u>. Internal Presentations take place at the host institution or at a local conference. Do not include group meetings.

I) From January 2016 - December 2016, total **external support** awarded for faculty member's project(s). *Rounded to the nearest \$1,000.*

m) From January 2012 - December 2016 (5 years), <u>average total **annualized external support**</u> for faculty member's research project(s). *Rounded to the nearest \$1,000.*

n) From January 2016 - December 2016, **internal support** provided by home institution for faculty member's research projects (<u>including</u> faculty member's summer research salary, undergraduate student stipends, research supplies, special research instrumentation, "competitive" internal grants and <u>excluding</u> faculty member's academic year salary and utilities costs). *Rounded to the nearest \$1,000.*

2018 Beckman Scholars Program Application BECKMAN SCHOLARS REPORT TABLE

Please provide the requested information	n for each Beckman	Scholar named under a	n institutional BSP award in 2008 or	later.
Institutional Beckman Scholars Awards	from 2008-2015:	Total Beckman	n Scholars from 2008-2015:	
Method of tracking students upon graduation	n:	·		
Name of Scholar:		Degree/Major:		
BSP Award Year (2008 or later only):		Graduating GPA:		<u> </u>
Mentor:	-	Date of Graduation:		
Degree(s) achieved to date and/or current degree program (include institution):				
Current Position/Affiliation:				
List of	Publications + Prese	ntations as a Beckman S	cholar:	
[
List of Awards, P	atents and/or notewo	rthy Achievements as a E	Beckman Scholar:	
List of (up to	10) Publications foll	owing graduation from th	is institution:	
			· · · · · · · · · · · · · · · · · · ·	
List of Awards, Patents an	d/or noteworthy Acni	evements following grade	uation from this institution:	
		•	•	
Name of Scholar:	r	Degree/Major:		
BSP Award Year (2008 or later only):		Graduating GPA:		
Mentor:	1	Date of Graduation:		
Degree(s) achieved to date and/or current degree program (include institution):				
Current Position/Affiliation:				
List of	Publications + Prese	ntations as a Beckman S	cholar:	
List of Awards, P	atents and/or notewo	rthy Achievements as a E	Beckman Scholar:	
List of (up to	0 10) Publications tone	owing graduation from th	is institution:	
List of America Detaute on	** ***********	following and		
LIST OF Awards, Patents an	d/or notewortny Acm	evements following grade	uation from this institution:	

2018 Beckman Scholars Program Application BECKMAN SCHOLARS REPORT TABLE

Please provide the requested information for each Beckman Scholar named under an institutional BSP award in 2008 or later.

•						
Name of Scholar:			Degree/Major:			
BSP Award Year (20	008 or later only):		Graduating GPA:			
Mentor:		•	Date of Graduation:			
Degree(s) achieved to degree program (incl	o date and/or current ude institution):					
Current Position/Aff	iliation:					
	List of	Publications + Prese	entations as a Beckman S	Scholar:		
	List of Awards, Pa	itents and/or notewo	orthy Achievements as a	Beckman Scholar:		
	List of (up to	10) Publications foll	owing graduation from the	his institution:		
L	ist of Awards, Patents and	/or noteworthy Achi	ievements following grad	luation from this institution:		
Name of Scholar:			Degree/Major:			
BSP Award Year (20	008 or later only):		Graduating GPA:			
Mentor:	• •	4	Date of Graduation:			
Degree(s) achieved to date and/or current degree program (include institution):						
Current Position/Aff	iliation:					
List of Publications + Presentations as a Beckman Scholar:						
List of Awards, Patents and/or noteworthy Achievements as a Beckman Scholar:						
List of (up to 10) Publications following graduation from this institution:						
	ist of Awards, Patents and	/or noteworthy Ach	ievements following grad	luation from this institution:		
L	ist of Awards, Patents and	/or noteworthy Ach	ievements following grad	luation from this institution:		

APPENDIX A – 2018 Beckman Scholars Program Application

Mentor Curriculum Vitae

Arial 11 pt., 1/2" margins - TWO PAGE MAX

NAME OF MENTOR	POSITION TITLE / DEPARTMENT
INSTITUTION	DATE OF APPOINTMENT: (mm/dd/yyyy required format)
CONTACT INFORMATION	

A. EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY

B. PROFESSIONAL EXPERIENCE

C. HONORS & AWARDS

D. SELECT PUBLICATIONS (Include <u>up to ten</u> most recent publications; underline undergraduate co-authors in publication list.)

E. Number and names of undergraduates participating in active laboratory research in the faculty member's current research activities.

F. Total number of undergraduate research students (UGRS) the faculty member has mentored to date. *Past Beckman Scholars Program Institutions*: Of the total UGRS, how may were Beckman Scholars.

APPENDIX B – 2018 Beckman Scholars Program Application

Mentor Statement

Arial 11 pt., 1/2" margins - ONE PAGE MAX

Name of Mentor:	Department:
Area of Research:	

MENTOR STATEMENT - Briefly describe your proposed Scholar Mentorship Plan (SMP). The proposed SMP should be reflective of how the Scholar will be mentored, *not* the nature of the research that is to be performed. Please include the following information:

- i. Proposed role for the Scholar as an undergraduate researcher in the Mentor's lab.
- ii. Frequency and nature of the planned interactions between the Scholar and the Mentor.
- iii. Specific plans the Mentor will employ to prepare the Scholar for graduate level research and future leadership roles in scientific research and innovation.

APPENDIX C - 2018 Beckman Scholars Program Application HISTORICAL BECKMAN SCHOLARS REPORT TABLE

	e requested information	for each Beckman S	Scholar named under an	institutional BSP award in 2007 or ea	rlier.					
Institutional Beckman Scholars Awards from 1998-2007:			Total Beckmar	n Scholars from 1998-2007:						
Method of tracking	students upon graduatio	n:								
Name of Scholar:		-	Degree/Major:							
BSP Award Year (20	007 or earlier only):		Graduating GPA:							
Mentor:		T	Date of Graduation:							
Degree(s) achieved to degree program (incl										
Current Position/Aft	iliation:									
	List of	Publications + Prese	ntations as a Beckman S	cholar:						
	List of Awards, P	atents and/or notewo	rthy Achievements as a E	Beckman Scholar:						
	List of (up to	10) Dublications fall		i. i						
		TO) Publications fold	owing graduation from th							
	List of Awards, Patents an	d/or noteworthy Achi	evements following gradu	uation from this institution:						
	·									
Name of Scholar:			Degree/Major:							
Name of Scholar: BSP Award Year <i>(20</i>	007 or earlier only):		Degree/Major: Graduating GPA:							
	007 or earlier only):									
BSP Award Year (20	o date and/or current		Graduating GPA:							
BSP Award Year <i>(20</i> Mentor: Degree(s) achieved to	o date and/or current ude institution):		Graduating GPA:							
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation:	Publications + Prese	Graduating GPA:	cholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation:	Publications + Prese	Graduating GPA: Date of Graduation:	cholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation:	Publications + Prese	Graduating GPA: Date of Graduation:	cholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): iliation: List of		Graduating GPA: Date of Graduation: ntations as a Beckman S							
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): iliation: List of		Graduating GPA: Date of Graduation:							
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): iliation: List of		Graduating GPA: Date of Graduation: ntations as a Beckman S							
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation: List of List of Awards, P	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S	Beckman Scholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation: List of List of Awards, P	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S	Beckman Scholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation: List of List of Awards, P	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S	Beckman Scholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation: List of List of Awards, P	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S	Beckman Scholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl	o date and/or current ude institution): illiation: List of List of Awards, P	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S	Beckman Scholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl Current Position/Aff	o date and/or current ude institution): illiation: List of List of Awards, P List of (up to	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S rthy Achievements as a B pwing graduation from th	Beckman Scholar:						
BSP Award Year (20 Mentor: Degree(s) achieved to degree program (incl Current Position/Aff	o date and/or current ude institution): illiation: List of List of Awards, P List of (up to	atents and/or notewo	Graduating GPA: Date of Graduation: ntations as a Beckman S rthy Achievements as a B pwing graduation from th	Beckman Scholar:						

The information provided in this section is for internal Foundation purposes only, and will not be considered in application evaluation.

APPENDIX C - 2018 Beckman Scholars Program Application HISTORICAL BECKMAN SCHOLARS REPORT TABLE

Please provide the requested information for each Beckman Scholar named under an institutional BSP award in 2007 or earlier.

-	•					
Name of Scholar:			Degree/Major:			
BSP Award Year (20	007 or earlier only):		Graduating GPA:			
Mentor:			Date of Graduation:			
Degree(s) achieved to degree program (incl	o date and/or current ude institution):					
Current Position/Aft	filiation:					
	List of	Publications + Prese	entations as a Beckman S	Scholar:		
	List of Awards, Pa	atents and/or notewo	orthy Achievements as a	Beckman Scholar:		
	List of (up to	10) Publications foll	owing graduation from the	nis institution:		
	the fit with Defende and	······································	· · · · · · · · · · · · · · · · · · ·			
L	ist of Awards, Patents and	l/or noteworthy Acn	ievements following grad	Juation from this institution:		
	•					
Name of Scholar:		1	Degree/Major:			
BSP Award Year (20	007 or earlier only):		Graduating GPA:			
Mentor:		T	Date of Graduation:			
Degree(s) achieved to date and/or current degree program (include institution):						
Current Position/Aft	filiation:					
List of Publications + Presentations as a Beckman Scholar:						
List of Awards, Patents and/or noteworthy Achievements as a Beckman Scholar:						
List of (up to 10) Publications following graduation from this institution:						
	ict of Awards Datents and	Ver notoworthy Ach	iovomonts following grad	luction from this institution:		
L	ist of Awards, Patents and	l/or noteworthy Ach	ievements following grad	luation from this institution:		
L	ist of Awards, Patents and	I/or noteworthy Ach	ievements following grad	luation from this institution:		