This document does not replace the NIH guidelines —please read the guidelines and solicitation thoroughly before preparing your proposal. The Parent Announcement for R21 Awards can be found at http://grants.nih.gov/grants/guide/pa-files/PA-16-161.html, and the NIH SF424 Application Guide can be found at http://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/general-forms-d.pdf.

FORMAT SPECIFICATIONS FOR ATTACHMENTS

- PDF files only file names are 50 characters or less and use only standard characters A through Z, a through z, 0 through 9, underscore (_), hyphen (-), space (), and period (.). Do not use any other special characters (e.g., "&", "*", "%", "/", or "#") in the file name.
- Margins are ½" all around.
- Font = black; Arial, Garamond, Georgia, Helvetica, Palatino Linotype, Times New Roman, or Verdana typeface are recommended; size 11 or larger; must be no more than 15 characters per linear inch (including characters and spaces)
- Do not include headers or footers.
- Project Title limited to 200 characters including spaces and punctuation; use only standard characters.
- Use section headings.

ATTACHMENTS NEEDED FROM FACULTY

- 1. <u>Project Summary/Abstract</u> (no more than 30 lines): Provide a concise description of project objectives and methodologies suitable for dissemination to the public.
- 2. <u>Project Narrative</u> (3 sentences): Describe relevance of research to public health in lay terms.
- 3. <u>Bibliography & References Cited</u> (no page limit): Each reference must include the names of all authors, article and journal title, book title, vol#, pg.#, year of publication. When citing articles that fall under the Public Access Policy (peer-reviewed, accepted for publication since April 7, 2008, and are a result of NIH funding) and were authored or co-authored by the applicant, provide the NIH Manuscript Submission reference number (e.g., NIHMS97531) or the PubMed Central (PMC) reference number (e.g., PMCID234567) for each article. If the PMCID is not yet available because the Journal submits articles directly to PMC on behalf of their authors, indicate "PMC Journal In Process."
- 4. Facilities and Other Resources (no page limit):
 - a. Instructions, sample and template can be found on the ORSP website at http://www.marquette.edu/orsp/ProposalWriting.shtml.
 - b. Identify the facilities to be used (Laboratory, Animal, Computer, Office, Clinical and Other).
 - c. Describe only those resources that are directly applicable to the proposed work.
 - d. Also describe how the scientific environment will contribute to the probability of success of the project.
 - e. If there are multiple sites, describe resources available at each site.
- 5. <u>Equipment (no page limit)</u>: Provide list of major equipment items already available. If appropriate, identify their locations and pertinent capabilities. Sample available on the ORSP website at http://www.marquette.edu/orsp/documents/NIHEquipmentSampleJan15.pdf
- 6. Biosketches (5 page maximum/person): Required for senior/key personnel and Other Significant Contributors
 - a. **NEW** Instructions and sample can be found on the ORSP website at http://www.marquette.edu/orsp/documents/NIHBiosketchInstructionsandSample_April2016.pdf
 - b. Include personal statement, positions and honors, <u>contributions to science</u> (You may provide a URL to a full list of your published work. This URL must be to a Federal Government website (a .gov suffix). NIH recommends using My Bibliography.), and ongoing/completed research support from past three years.
 - c. When citing articles that fall under the Public Access Policy (peer-reviewed, accepted for publication since April 7, 2008, and are a result of NIH funding) and were authored or co-authored by the applicant, provide the NIH Manuscript Submission reference number (e.g., NIHMS97531) or the PubMed Central (PMC) reference number (e.g., PMCID234567) for each article. If the PMCID is not yet available because the Journal submits articles directly to PMC on behalf of their authors, indicate "PMC Journal In Process."
- 7. Budget Forms and Justification [Note: ORSP liaison will create shell and route to faculty for editing.]

- 8. Cover Letter: http://www.marquette.edu/orsp/documents/NIHCoverLetterFormatGuidance April2016.pdf
- 9. <u>Assignment Request Form this is a form page, available here http://www.marquette.edu/orsp/documents/PHSAssignmentRequestForm_April2016.pdf</u>
- 10. <u>Specific Aims</u> (**1 page**): Concisely state goals and specific objectives of the proposed research and summarize expected outcomes, including the impact the results will exert on the research field.
- 11. Research Strategy (6 pages): [Must be organized in following order. Use section headings]
 - a. Significance
 - b. Innovation
 - c. Approach
- 12. Human Subject Sections (if applicable) [Create separate attachments for each; no page limits]:

http://www.marquette.edu/orsp/documents/NIHHumanSubjectsFormatGuidance April2016.pdf

- a. <u>Protection of Human Subjects</u>
- b. Data Safety Monitoring Plan required if proposing a clinical trial
- c. Inclusion of Women and Minorities
- d. <u>Inclusion of Children</u>
- e. <u>Inclusion Enrollment Report</u> this is a form page, available here <u>http://www.marquette.edu/orsp/documents/PHS-Inclusion-Enrollment-Report April2016.pdf</u>
- 13. Other Research Plan Sections (if applicable) [Create separate attachments for each]:
 - a. <u>Vertebrate Animals</u> (if applicable, no page limit). Instructions available here http://www.marquette.edu/orsp/ProposalWriting.shtml
 - b. <u>Select Agent Research</u> (if applicable)
 - c. <u>Multi PI Leadership Plan</u> (if applicable). Instructions and sample available here <u>http://www.marquette.edu/orsp/documents/NIHMultiplePILeadershipPlanInstructionsandSampleJan15</u>.pdf
 - d. Consortium/Contractual Agreements (if there is/are subcontractor(s))
 - e. Letter(s) of Support consortium and consultant letters (not a requirement)
 - f. Resource and Model Organism Sharing Plans
 - i. Data sharing plan **(1 paragraph)**: for project over \$500,000/yr direct costs Instructions available here
 - http://www.marquette.edu/orsp/documents/NIHDataSharingPlanInstructionsandTemplateJan1 5.pdf
 - ii. Sharing model organisms plan **(no page limit)**: only if the creation of a new mouse model is proposed. Outline a plan to make research findings available to qualified individuals within the scientific community.
 - g. <u>Authentication of Key Resources Plan</u> (if applicable, 1 page):
 - i. Briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposed studies.
 - ii. Instructions and sample can be found on the ORSP website at http://www.marquette.edu/orsp/ProposalWriting.shtml.
- 14. <u>If resubmission or revision</u> include a **1 page** introduction section detailing the reviewer comments addressed in the application.

UNIVERSITY FORMS/SUPPLEMENTARY DOCUMENTATION NEEDED: Forms generated by ORSP when project title and budget are finalized and then routed to the faculty in order to obtain institutional review and approval (reviewed/signed by department chair and college dean and others making commitments, if any).

- 1. Marquette University Proposal Registration Form
- 2. Disclosure of Financial Interests Form
- 3. ORSP Budget Form
- 4. List of all Project Sites
 - a. If collaborating with another site, a letter of intent, along with a scope of work and budget will need to be provided by the other institution.
- 5. List of all Key Personnel (those who contribute to the scientific development or execution of the project in a substantive, measurable way, whether or not salaries are requested)

a. Letters of support/verification of key personnel's commitment to the project should be given to ORSP

6. Letters of support/verification of commitment from any other Marquette resources needed