



PART I – OVERVIEW INFORMATION

Autism Intervention Research Network on Physical Health (AIR-P)

Title: AIR-P Network: Pilot Subcontracts on Treatment Research Affecting Autism

Request For Applications (RFA) Number: ATN-AIR-10-02

Key Dates

Release/Posted Date: **January 15, 2010**

Letters of Intent Receipt Date: **Not applicable**

Application Submission/Receipt Date: **March 12, 2010**

Review Date: **May/June 2010**

Earliest Anticipated Start Date: **September 1, 2010**

PART II – FULL TEXT OF ANNOUNCEMENT

SECTION I. SUBCONTRACT-SUPPORTED RESEARCH OPPORTUNITY DESCRIPTION

RESEARCH OBJECTIVES

Purpose

The Autism Treatment Network (ATN), through the support of the AIR-P Network, requests applications for two levels of pilot-supported activities (subcontract research):

- **LEVEL 1** support for small starter pilot opportunities directed mainly to junior investigators;
- **LEVEL 2** support for larger pilot studies to gather preliminary data to support more extensive research programs

Mission, Goals and Objectives

The ATN, an established program of Autism Speaks (AS), is a national network of fourteen leading hospitals and medical centers dedicated to improving the health and well-being of individuals with autism spectrum disorders (ASD) and other developmental disabilities. The ATN's unique strengths include access to an established collaborative network infrastructure across multiple institutions, a data registry of children receiving ongoing care in participating sites, and considerable collective scientific and clinical experience as a platform for research on evidence-based practices for interventions, policy development and dissemination.

The goals of the ATN are to a) expand the number of high-quality multidisciplinary clinical sites providing comprehensive evaluation and care for children and youth with ASD; b) develop, review, and disseminate common clinical standards and evidence-based guidelines for medical care for children and adolescents with ASD; and c) advance the evidence base and research on medical issues for children and youth with ASD.

Autism Speaks' nationwide reach enables the ATN to have a significant impact at both State and Federal levels to increase the accessibility of evidence-based treatments. The ATN brings together physicians in the context of a multidisciplinary clinical team, other clinicians, researchers, and families to form a multi-tiered network to ensure rapid dissemination and implementation of treatments, guidelines and tools.

Under the Combating Autism Act Initiative, the Maternal and Child Health Bureau (MCHB) initiated programs in several critical areas, including the Autism Intervention Research Network Program. This program includes two Autism Intervention Research Networks that focus on intervention research, guideline development and information dissemination—one network focuses on physical health interventions (AIR-P), and one network focuses on behavioral, mental, social, and/or cognitive health interventions (AIR-B). The ATN serves as the AIR-P.

Under the support for the AIR-P Network Program, the ATN actively engages in:

- Research on evidence-based practices for interventions to improve the physical health and well-being of children and adolescents with ASD and other developmental disabilities,
- Developing evidence-based guidelines and tools for interventions to improve the health care of children and adolescents with ASD and other developmental disabilities, and
- Disseminating critical information on its research findings, guidelines developments, and validated tools to health professionals and the public, especially families impacted by ASD and other developmental disabilities.

Through the AIR-P Program, the ATN conducts research activities across ATN centers (collaborating research entities - CREs). These centers actively provide ongoing, comprehensive behavioral and medical treatment to children and adolescents with ASD, as well as participate in single and multi-site research, clinical trials, and observational/intervention studies. The CREs currently include:

- Baylor College of Medicine
- Cincinnati Children's Hospital
- Columbia University
- Kaiser Permanente Northern California
- Kennedy-Krieger Institute
- LADDERS/MassGeneral Hospital
- Oregon Health & Science University
- Toronto Autism Network (Bloorview Kids Rehab, Surrey Place Centre and the Hospital for Sick Children)
- University of Arkansas/Arkansas Children's Hospital
- University of Colorado/The Children's Hospital
- University of Missouri
- University of Pittsburgh
- University of Rochester
- Vanderbilt University

This RFA builds upon the existing ATN infrastructure and scientific expertise that exists across the network CREs:

- To implement a collaborative mechanism to develop innovative research concepts and protocols that will help improve care for children with ASD
- To carry out a series of pilot studies providing preliminary findings and to seek outside funding opportunities to develop full scale implementation and intervention research

Funding Priorities

For this RFA, the ATN has particular interest in supporting junior investigators in developing their research efforts to improve the medical care of children with autism. Along with this interest in young investigators, the priorities for this RFA also include attention by junior and senior investigators to novel ideas that may face difficulties with funding from other sources, for preliminary data development in critical areas of clinical interest, and/or increased collaboration across research disciplines.

Opportunities for external collaboration

MCHB LEND TRAINING PROGRAMS / MCHB DEVELOPMENTAL-BEHAVIORAL PEDIATRIC PROGRAMS:

As this RFA is made possible through the Combating Autism Act, collaborations with other CAAI sponsored programs such as MCHB LEND Training Programs and MCHB Developmental-Behavioral Pediatrics Training Programs are encouraged. Individuals from these programs are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals.

This collaborative arrangement must be organized, managed and submitted directly through an existing ATN PI/site. The ATN site would be the recipient of the subcontract and the external LEND/DBP investigator would be reported as a named, unpaid consultant. This RFA does not provide salary support for LEND/DBP investigators in these programs, nor does it provide mentorship support. Any LEND/DBP consultant must be identified in the supporting budget and budget narrative pages (ie., report FTE, role on project).

NON-ATN INVESTIGATORS

Individuals from non-ATN centers are eligible to collaborate with an existing ATN PI/site. The proposal must be organized, managed and submitted directly through an existing ATN PI/site. The ATN site would be the recipient of the subcontract and the external investigator would be reported as a paid consultant on the LEVEL 1 or LEVEL 2 proposal. Any external consultant must be identified in the supporting budget and budget narrative pages (ie., report FTE, role on project).

Background

Autistic Spectrum Disorders (ASD) are a set of complex neurodevelopmental disorders defined behaviorally by impaired social interaction, delayed and disordered language, repetitive or stereotypic behavior and a restricted range of interest. Current prevalence studies show that approximately one out of every 100 children in the U.S. is diagnosed with an ASD. Many individuals with ASD have symptoms associated with underlying medical conditions, including seizures, sleep problems, gastrointestinal (GI) disorders, and metabolic conditions, that when left untreated, may compromise not only general health, but also behavioral, developmental, and educational outcomes of individuals with ASD. Unfortunately, children with ASD face many barriers in accessing appropriate healthcare and are less likely than children with mental retardation or other special needs to obtain the specialty medical care that they need.

The barriers to medical care for children with ASD include the lack of primary and specialty health care providers with the training and experience to identify and assess medical conditions appropriately in this population. Even when medical conditions are recognized, physicians are reluctant to treat patients with ASD because there are no standard diagnostic and treatment procedures and minimal medical standards to treat the associated medical conditions or guide their care. This is due, in part, to the fact that physicians and parents have traditionally viewed ASD as a communication and behavioral disorder. Thus, treatment has tended to focus on these aspects of ASD, while medical conditions in patients have not received adequate attention.

A critical goal of the ATN has been to improve medical treatment for children and youth with ASD by establishing standards of clinical care and evidence-based guidelines. Nonetheless, the evidence supporting clinical care for many conditions associated with ASD is sparse, and there is a pressing need to develop this evidence in systematic ways. This has been a major motivation for the ATN to expand its activities through the AIR-P network. The network's interests extend beyond understanding the associated medical conditions and the implications of these conditions on functioning of individuals and their overall well-being. The ATN seeks to translate data acquired from studies of the conditions affecting ASD to potential treatments directed to improving these conditions and thereby improving functioning.

SECTION II. SUBCONTRACT INFORMATION

SUBCONTRACT-SUPPORTED RESEARCH & FUNDS AVAILABLE

Collaborating Research Entity (CRE) support:

LEVEL 1: Support opportunities targeting junior-level investigators –

To support short-term pilot studies, which includes analyses of existing ATN Registry data; proposal leadership should have clear mentoring from senior investigator(s), preferably one at the home institution but can have additional mentoring elsewhere. These studies would be completed in a 12 month period.

Number of Subcontracts: 3-5 subcontracts available to support Level 1 activity.

Subcontract Amounts: Up to \$40,000 direct costs for 1 year.

LEVEL 2: Support opportunities targeting both junior and senior-level investigators –

To support larger innovative projects gathering pilot data for more in-depth studies fundable by external sources (Autism Speaks, NIH, etc). These studies would be conducted over a 2 year period and include efforts to bring multiple research disciplines together. All level 2 proposals should involve two or more ATN sites. Funding for year-02 is contingent upon a satisfactory progress report, submission of an updated budget, and availability of HRSA funding.

Number of Subcontracts: 2-3 subcontracts available to support Level 2 activity.

Subcontract Amounts: Up to \$150,000 direct costs (per year) for up to 2 years.

External investigators:

MCHB LEND TRAINING PROGRAMS / MCHB DEVELOPMENTAL-BEHAVIORAL PEDIATRIC PROGRAMS:

Individuals from these programs are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals. This collaborative arrangement must be organized, managed and submitted directly through an existing ATN PI/site. The ATN site would be the recipient of the subcontract and the external LEND/DBP investigator would be reported as a named, unpaid consultant. This RFA does not provide salary support for LEND/DBP investigators in these programs, nor does it provide mentorship support. Any LEND/DBP consultant must be identified in the budget, budget narrative and supporting documents (ie., include FTE, role on project, biosketch, IRB certification).

NON-ATN INVESTIGATORS

Individuals from non-ATN centers are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals. The proposal must be organized, managed and submitted directly through an existing ATN PI/site. The ATN site would be the recipient of the subcontract and the external investigator would be reported as a paid consultant on the LEVEL 1 or LEVEL 2 proposal. Any external consultant must be identified in the budget, budget narrative and supporting documents (ie., include FTE, role on project, biosketch, IRB certification).

Indirect Costs:

Indirect costs are those costs incurred for common or joint objectives which cannot be readily identified but are necessary to the operations of the organization, e.g., the cost of operating and maintaining facilities, depreciation, and administrative salaries. Indirect costs will be reported using your institutional federally negotiated research rate for the identified project period(s). No funding can be used to pay indirect costs for non-US institutions.

Please note that the applicant must submit a copy of the latest negotiated rate agreement. Approved research projects that will be conducted by the Network can charge a research indirect cost rate for the sole purpose of conducting the research study.

SECTION III. ELIGIBILITY INFORMATION

1. Eligible Applicants

1.A. Eligible Institutions

- Must be a currently funded ATN center at the time of proposal submission.
- Non-US institutions may apply but indirect costs are not allowed.
- MCHB LEND Training Programs and MCHB funded Developmental-Behavioral Pediatrics Training Programs at the time of proposal submission are eligible. The proposal must be a collaborative arrangement and must be organized, managed and submitted directly through an existing ATN PI/site.
- Sites are strongly encouraged to collaborate with their CTSA's if they have one.

1.B. Eligible Individuals

- Individuals holding full-time tenured or tenure-track faculty appointments or equivalent full-time non-tenure track appointments at an existing ATN center are eligible to apply.
- Postdoctoral fellows at an existing ATN center are eligible and encouraged to apply for **LEVEL 1** support.
- MCHB LEND Training Program trainees and MCHB funded Developmental-Behavioral Pediatrics Training Program fellows are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals. The ATN site would be the recipient of the subcontract and the external LEND/DBP investigator would be reported as a named, unpaid consultant.
- Individuals from non-ATN centers are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals. The ATN site would be the recipient of the subcontract and the external investigator would be reported as a paid consultant.

1.C. Principal Investigators

- PIs must have an M.D. and/or Ph.D.
- Background Requirements:
 - **LEVEL 1 Support:**
 - Postdoctoral fellows / Junior-level investigators are eligible and encouraged to apply.
 - **LEVEL 2 Support:**
 - PIs can be junior or senior-level researchers at the institution and must have a demonstrated track record of research with individuals with autism or other neurodevelopmental disorders. Researchers without ASD experience but with other clear investigative skills that could apply to ASD research are also encouraged to apply.
 - Research Experience: a proven track record of external funding and peer-reviewed publications and presentations.
 - Must include two or more ATN sites.
- MCHB LEND trainees and MCHB funded DBP fellows are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals. These individuals cannot be reported as the lead project PI. The proposal must be organized, managed and submitted directly through an existing ATN PI/site.
- Individuals from non-ATN centers are eligible to collaborate with an existing ATN PI/site for both LEVEL 1 and LEVEL 2 proposals. These individuals cannot be reported as the lead project PI. The proposal must be organized, managed and submitted directly through an existing ATN PI/site.

2. Targeted Research Topics/Areas of Interest

The goal of the Autism Treatment Network under the support of the AIR-P Network is to establish and maintain a network infrastructure designed to be the platform from which to conduct research on evidence-based practices for interventions to improve the physical health and well-being of children and adolescents with autism spectrum disorders (ASD) and other developmental disabilities. Physical health may include but is not limited to medical, dental, visual, nutrition and speech/hearing components. The ATN invites and encourages proposals in the following areas:

- **Long Term Outcomes:** While the ATN has a goal of improving outcomes through better medical care, defining what is an improved outcome is difficult. What measures are critical? Who is getting better and why? What is the child's trajectory? What variables influence outcome? Studies outlining clear strategies of monitoring progress across several domains are encouraged
- **Complementary/Alternative Medications (CAM) and Treatments:** Use of CAM is commonly reported, occurring in approximately 20% of U.S. households. Reports in families of children with ASD are similar if not higher. Few CAM treatments have undergone well controlled evaluations. CAM use in ASD population, and potentially randomized controlled trials could be considered.
- **Pediatric Gastroenterology:** Many children with ASD appear to have gastrointestinal problems (including GERD, motility disorders, gut mucosus and gastroinflammation). Whether these occur through some common biologic mechanism or reflect disordered eating behaviors or have other causes is unclear. Many issues in nutrition and GI complaints and their treatment among children with ASD lend themselves to careful investigation,.
- **Pediatric Psychopharmacology:** Many children with ASD are treated with psychotropic medications, even though only two medications have been specifically approved for treatment of ASD behaviors and irritability. The need for systematic research into psychopharmacology for ASD characteristics is clear, esp., taking into account various phenotypic and genotypic differences in the population.
- **Genetics/Metabolics:** A number of genetic and metabolic conditions have phenotypes similar to or consistent with ASD. These associations lend themselves to studies of etiologies and potential mechanisms of disease and treatment.
- **Pain** – Many problem symptoms and behaviors seen in ASD are thought to be related to altered pain responses, either in the patient's communication of pain or their interpretation and response to the pain. Studies examining better ways of assessing pain or of facilitating expression of pain are encouraged.
- **Immunology:** A number of studies have indicated abnormalities in the immune response in children with ASD and suggested opportunities for new treatments. Evaluation of immune status and markers for inflammation and novel interventions for altered immune status are areas of interest.
- **Endocrinology:** How do pubertal changes affect ASD and its manifestations?
- **Occupational Therapy/Speech Therapy**
- **Pediatric Neurology:** While ASDs have a clear neurologic basis, it is unclear what mechanisms are responsible or associated with these disorders and their comorbidities. The scope and specifics of neurologic evaluation, use of pharmacologic agents, and utility of various neuroimaging modalities in routine evaluation and management, and in special situations (sleep problems, self-injurious behavior, etc) is still controversial.

SECTION IV. APPLICATION AND SUBMISSION INFORMATION

1. Content and Form of Application Submission

Letter of Intent: A letter of intent is not required for this subcontract-supported research opportunity.

This RFA and all application materials/forms will be available to you as of Friday, January 15, 2010.

- <http://www.atnresearch.org>
- <http://www.autismspeaks.org/science/programs/atn/index.php>

This information will also be sent directly to all currently funded ATN centers. A signed Statement of Intent to enter into a subcontract agreement must accompany the application.

2. Submission Dates and Times

Full Application Deadline: **Friday, March 12, 2010**

ELECTRONIC SUBMISSION: Applicants should send the complete application by email as a single PDF document.

Applications and supporting materials must **be received in the office by 5 pm ET on Friday, March 12, 2010.**

The proposal and supporting documents should be emailed as a **single** PDF file to:

Brian Winklosky
ATN Research Program Manager
Email: BWinklosky@Partners.org
Subject Line of Email: **"REF: ATN-AIR-10-02 Submission"**

HARD COPY SUBMISSION: In addition, applicants should send hard copies [1 original (single-sided) + 2 copies (single-sided)] to the ATN Clinical Coordinating Center to **be received by Monday, March 15, 2010.** PLEASE NOTE: Hard copies should be identical to the electronic submission. Page substitutions and proposal changes will not be accepted without prior approval from the ATN Clinical Coordinating Center.

Hard copies should be sent to:

Brian Winklosky
ATN Research Program Manager
Massachusetts General Hospital
50 Staniford Street, Suite 901
Boston, MA 02114
REF: **ATN-AIR-10-02 Submission**

3. Peer Reviews

Application Submission/Receipt Date: **March 12, 2010**

Peer Review Date: **May/June 2010**

Completed proposals will be peer reviewed by internal members of the ATN Scientific Review Committee as well as external ad hoc reviewers with relevant content expertise. Reviews will be conducted in May/June 2010. Review summaries and subcontract announcements will be released July 2010.

Proposals will be reviewed using criteria in the following core content areas:

- **Significance:** Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical

practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

- **Investigator(s):** Are the PIs, specialists, collaborators, and other researchers well suited to the project? Do they have appropriate experience and training? Since the project is collaborative or multi-PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project? Are there proposed collaborations with external investigators? If so, are these appropriately identified and well suited to the research?
- **Innovation:** Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?
- **Approach:** Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed? If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?
- **Environment.** Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Does the institution have a CTSA and is it involved in the project? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?
- **Protections for Human Subjects.** For research that involves human subjects, the committee will evaluate the justification for review criteria: 1) risk to subjects, 2) adequacy of protection against risks, 3) potential benefits to the subjects and others, 4) importance of the knowledge to be gained, and 5) data and safety monitoring for any proposed clinical trials.
- **Inclusion of Women, Minorities, and Children.** When the proposed project involves clinical research, the committee will evaluate the proposed plans for inclusion of minorities and members of both genders, as well as the inclusion of children.
- **Budget and Period Support.** Reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed research.

4. Anticipated Announcement and Subcontract Dates

Subcontracts Announced: **July 2010**

Earliest Anticipated Start Date: **September 1, 2010**

5. Subcontract Restrictions

Funds may be allocated for personnel, consultants, supplies, domestic travel, patient care costs, equipment, and miscellaneous expenses. Equipment allocations cannot be used for large, permanent equipment purchases. A detailed budget with justification must be included with the full application.

Indirect costs will be reported using your institutional federally negotiated research rate for the identified project period(s). No funding can be used to pay indirect costs for non-US institutions.

SECTION V. SUBCONTRACT SUPPORT INFORMATION

1. Subcontract Notices

Individuals that submit full and complete applications will be notified of their application status by email in July 2010. Official notices will be sent within a week of the email notification. The earliest a subcontract period may start is September 1, 2010. Subcontract periods officially start on the date subcontracts have received an appropriate IRB-approved protocol (and supporting materials) and have an approved, final budget.

2 A. Sharing Research Data

Data must be contributed to the ATN Registry at the end of the study after a mutually agreeable hold-back period. Data may be entered through the ATN Registry data management systems, AdvantageEDC (for clinical or custom forms) or the Internet System for Assessing Autistic Children (ISAAC) database (for copyrighted standardized assessments) Biostatistics and analysis of data can be coordinated for multi-site studies by the ATN data coordinating center (EMMES Corp). If a project lead chooses to use the ATN Registry database systems for data entry, they must include a budget for the associate costs as part of their grant.

2 B. Sharing Research Resources

Publications resulting from use of Registry data from the ATN database must acknowledge the ATN and all sites who contributed data to the publication (according to existing ATN publication policy which is outlined in the ATN Manual of Procedures).

Publication of Data (excerpt from the UA3 AIR-P and AIR-B application guidance, regarding publications, followed by sample language crediting the funding source)

Prompt and timely presentation and publication in the scientific literature of findings resulting from research undertaken in the Network is required. As per HHS guidelines, the Awardee agrees to acknowledge HRSA support in the publications and oral presentations resulting from research and/or activities conducted under this cooperative agreement. Investigators must agree to abide by Network policies concerning all publication of Network studies. Prior to the submission of manuscripts for publication Awardees agree to provide preprint copies to the Network Steering Committee according to policies and procedures the Steering Committee may establish to monitor the presentation and publication of research results. Peer-reviewed publications are the cardinal measure of success of the MCH Research Program. The number of publications resulting from each funded project contributes to the total number of publications by which the MCH Research Program is evaluated annually.

All studies funded by these subcontracts should credit the funding source: "This study was supported by cooperative agreement UA3 MC 11054, Autism Intervention Research Network on Physical Health (AIR-P Network) from the Maternal and Child Health Bureau (Combating Autism Act of 2006), Health Resources and Services Administration, Department of Health and Human Services."

3. Reporting

Within 60 days after the end of each budget year, subcontractors are required to submit a written progress and financial report along with a written request to use carry-forward funding with updated budget, if applicable. A written final report is required at the end of the subcontract period. Release of funds for each additional period is contingent upon receipt of the satisfactory progress and financial report and the updated budget for the next year. The use of carry-forward funding is subject to prior approval from the ATN Clinical Coordinating Center.

Further terms and conditions will be forthcoming in a written subcontract to be signed by the authorized institutional officials of Massachusetts General Hospital and the subcontractor institution.

SECTION VI. ATN CLINICAL COORDINATING CENTER CONTACTS

Proposal Development and Subcontract Budgets:

MGH Network Coordinating Center
Brian Winklosky - Research Program Manager
Phone: 617-643-1036
Email: bwinklosky@partners.org

Administrative Support:

MGH Network Coordinating Center
Jessie Figueroa - Staff Assistant
Phone: 617-643-6772
Email: jfigueroa8@partners.org

SECTION VII. CONTENT AND FORM OF APPLICATION SUBMISSION

This RFA and all application materials/forms will be available to you on the ATN website as of 5pm ET Friday, January 15, 2010.

- <http://www.atnresearch.org>

Additionally, the materials will be available to you on the Autism Speaks website as of 5pm ET Tuesday, January 19, 2010.

- http://www.autismspeaks.org/science/programs/atn/atn_physicians_researchers.php

PROPOSAL ASSEMBLY – PLEASE USE THE FOLLOWING OUTLINE

SECTION	DESCRIPTION / FORMAT
SECTION 1	ATN PROPOSAL COVER PAGE (1 page). Include PI details as well as the institutional business official responsible for managing/negotiating subcontract agreements. ONLY 1 PROPOSAL COVER PAGE PER PROPOSAL. DO NOT SUBMIT A COVER PAGE FOR EACH PARTICIPATING SITE.
SECTION 2	ABSTRACT (1 page). Include a concise abstract of the proposed study (250 words or less).
SECTION 3	RESEARCH PLAN NARRATIVE (not to exceed 12 pages). See detailed instructions below. This does NOT include table of contents, references or supporting materials such as budgets, budget justifications, or resource pages.
SECTION 4	BUDGET PAGE, INITIAL PROJECT PERIOD (1 page): You must use the standard PHS 398 Budget Form page 4 (Revised 6/2009) found here: (http://grants.nih.gov/grants/funding/phs398/phs398.html). Budgets require institutional sign-off by a designated business official (grants and contracts).
SECTION 5	BUDGET PAGE, ENTIRE PROPOSED PROJECT PERIOD (1 page): You must use the standard PHS 398 Budget Form page 5 (Revised 6/2009) found here: (http://grants.nih.gov/grants/funding/phs398/phs398.html). Budgets require institutional sign-off by a designated business official (grants and contracts).

SECTION 6 BUDGET JUSTIFICATION (not to exceed 5 pages pages). Provide detailed and itemized budget by category (for each budget period). The budget justification is not considered part of the 12-page proposal.

Funds may be allocated for personnel, consultants, supplies, travel, patient costs, equipment, and miscellaneous expenses. Please include all personnel even if no salary support is requested.

You must identify fringe rates and escalation rates for all personnel listed (show calculations). Equipment allocations cannot be used for large, permanent equipment purchases. Indirect costs are not inclusive of the total award. **Please note that the applicant must submit a copy of the latest negotiated rate agreement for each budget period.**

PROPOSALS WITH EXTERNAL COLLABORATIONS:

All collaborative arrangement must be organized, managed and submitted directly through an existing ATN PI/site. The ATN site would be the recipient of the subcontract and the external investigator would be reported as a consultant. This RFA does not provide salary support for LEND/DBP investigators in these programs, nor does it provide mentorship support. Any consultant must be identified in the budget, budget narrative and supporting documents (i.e., include FTE, role on project, biosketch, IRB certification).

SECTION 7 BIOSKETCH (not to exceed 4 pages). Include a biosketch for all key research personnel identified on the project, including paid/unpaid consultants. Standard PHS 398 pages for all identified key research personnel should be provided using the NIH format only and should not exceed 4 pages per individual. A copy of the NIH biographical sketch form can be found on the following webpage (<http://grants.nih.gov/grants/funding/phs398/phs398.html>).

SECTION 8 RESOURCE PAGE. A copy of the NIH Resource form can be found on the following webpage (<http://grants.nih.gov/grants/funding/phs398/phs398.html>). This information is used to assess the capability of the organizational resources available to perform the effort proposed.

- Identify the facilities to be used (research/laboratory/clinical space, computer, office, other). Describe only those resources that are **directly applicable** to the proposed work.
- Describe how the scientific environment in which the research will be done contributes to the probability of success (e.g., institutional support, physical resources, and intellectual rapport). In describing the scientific environment in which the work will be done, discuss ways in which the proposed studies will benefit from unique features of the scientific environment or subject populations or will employ useful collaborative arrangements.
- If there are multiple performance sites, describe the resources available at each site.
- Describe your institution's CTSA and the relationship of the project to the CTSA resources.

SECTION 9 IRB ACKNOWLEDGEMENT. Include administrative acknowledgement (Institutional Notice or Letter) from the Human Subjects **Institutional Review Board** indicating the IRB's acknowledgement of the grant application. This is meant to demonstrate your planned IRB submission and target timeline for anticipated approvals.

SECTION 10 HUMAN SUBJECTS CERTIFICATION. Include proof that all identified personnel have completed appropriate Human Subjects Ethics training and/or **HIPAA** training. Include copies of completion certificates for all identified key personnel. HIPAA certification can be

obtained online through the Collaborative Institutional Training Initiative (CITI) –
www.citiprogram.org.

SECTION 11 STATEMENT OF INTENT. Include your institutions' signed statement of intent to enter into a subcontract agreement

NOTE ABOUT LEVELS OF SUPPORT (for BUDGET SECTIONS 4 & 5)

- **LEVEL 1:** Support opportunities targeting junior-level investigators –
To support short-term pilot studies, which can include analyses of existing ATN Registry data; proposal leadership should have clear mentoring from senior investigator(s), preferably one at the home institution but can have additional mentoring elsewhere. These studies would likely be conducted in a 12 month period.
Number of Subcontracts: 3-5 subcontracts available to support Level 1 activity.
Subcontract Amounts: Up to \$40,000 direct costs for 1 year.
- **LEVEL 2:** Support opportunities targeting both junior and senior-level investigators –
To support larger innovative projects gathering pilot data for more in-depth studies fundable by external sources (Autism Speaks, NIH, etc). These studies would likely be conducted over a 2 year period, involve more than one ATN site, and include efforts to bring multiple research disciplines together. Funding for year-02 is contingent upon a satisfactory progress report, submission of an updated budget, and availability of HRSA funding.
Number of Subcontracts: 2-3 subcontracts available to support Level 2 activity.
Subcontract Amounts: Up to \$150,000 direct costs (per year) for up to 2 years.

DETAILED INSTRUCTIONS FOR RESEARCH PLAN NARRATIVE

General Format:

Total Page Limit:	12 pages (single-sided). This does not include table of contents, references or supporting materials such as budgets, budget justifications, or other supporting documents.
Font:	Arial, Times New Roman, or Palatino Linotype typeface and a font size of 11 points. A smaller font size may be used for figures, graphs, diagrams, charts, tables, figure legends, and footnotes, but this type must follow the font typeface requirement and be readily legible.
Margins:	1" on all sides.
Paper:	8 ½ X 11" (no A4)
Numbering:	All pages in this proposal should be numbered sequentially in the bottom right corner.
Headers:	The RFA number should appear with the full name of the study's PRIMARY/LEAD Principal Investigator as shown below (top right, justified margin).

Principal Investigator: LAST, First Middle Initial ATN-AIR-10-02

Program Narrative Components (not to exceed 12 pages for sections I – IV below):

I. Introduction: Should be a brief discussion of what led to the current study:

- describe what previous studies have shown that led you to formulate this specific question;
- should not be lengthy review of literature;
- close with a statement of the question to be addressed in the study and brief comment regarding the type or setting of the study.

II. Specific Aims / Hypothesis: Clearly state the study aims and associated hypothesis:

- describe well-focused objectives and milestones;
- consider your aims to test your hypothesis;
- limit your proposal to 3-4 aims, at most.

III. Background & Significance / Preliminary Studies: Describe the theoretical framework, initial development, and existing empirical support for the study:

- background for the study design;
- expected therapeutic benefit(s) and the likelihood that the benefit(s) will outweigh any negative side effects;
- selection of the targeted symptom(s)
- how the expected benefit(s) of the treatment will address the needs of the participating children and families, including specific functional outcomes;
- how strong positive findings could be further evaluated in larger studies;
- use of any biomarkers.

IV. Research Design & Methods: Include recruitment and sample description, well defined inclusion/exclusion criteria, study measures, analytic plan, plans to address Protections for Human Subjects, and Inclusion of Women, Minorities, and Children:

- sampling strategy, implementation and evaluation methods;
- study measures (i.e., what do they measure, how reliable are they, reference them if used in previous studies; for intervention studies, when applied (i.e., before/after, etc.);
- the nature and relevance of control groups (including the use of historical control groups);
- methods to control for confounding factors and bias;
- statistical power analysis;
- data analysis plan (both techniques and how specific main questions will be answered) & potential limitations;
- feasibility of achieving study objectives within the funding period (including sample availability) / timeline;
- address any ethical issues implicit in study design;
- protections for human subjects;
- inclusion of women, minorities, and children.

V. References: Literature cited with complete literature citations including titles and all authors. Not included in 12 page limit.



Autism Intervention Research Network on Physical Health (AIR-P)

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