# 1 Core 1 Timelines and Milestones

## 1.1 MIT

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|-----|-----------|-----------------------------|--------|
| 1.1 | Methods to learn shape representations | Year 2 | Completed |
| 1.2 | Shape in atlas-driven segmentation | Year 4 | Partially completed — preliminary results |
| 1.3 | Validate and refine approach | Year 5 | Partially completed — preliminary validation |
| 2.1 | Methods to compute statistics of shapes | Year 4 | Partially completed — software framework |
| 3.2 | Fiber statistics | Year 4 | Partially completed — tract clustering |

Planned modifications to the proposed timeline:

| Aim | Milestone | Modification |
|-----|-----------|--------------|
| 2.4 | Plan to develop software infrastructure to integrate shape analysis tools into the pipeline for population studies. | New |
| 4 | Plans to for fMRI development including local and atlas-based priors for quantifying activation. | New |

## 1.2 Harvard — MGH

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|-----|-----------|-----------------------------|--------|

Planned modifications to the proposed timeline:
None.

## 1.3 Utah

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|-----|-----------|-----------------------------|--------|
| 1.1 | Filtering of DTI | Year 2 | Completed |
| 1.2 | Quantitative analysis of DTI | Year 3 | Completed partially, ongoing |
| 1.3 | Segmentation of cortex/WM | Year 3 | Completed partially, ongoing |
| 2.1 | Filtering and feature detection | Year 3 | Incomplete, ongoing. |
| 3 | Fast implementations PDEs | Year 4 | Incomplete, ongoing. |

Planned modifications to the proposed timeline:

| Aim | Milestone | Modification |
|-----|-----------|--------------|
| 2.2 | Feature-based brain image registration. | Shift emphasis to shape-based analysis/registration |

## 1.4 UNC

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|-----|-----------|-----------------------------|--------|
| 1.1 | Comparative anal. of shape anal. schemes | Year 2 | Completed |
| 1.3 | Statistical shape analysis incl. patient variable | Year 5 | Completed |
| 2.1 | DTI tractography tools | Year 4 | Completed |
| 2.2 | Gometric characterization of fiber tracts | Year 5 | Completed |
| 2.3 | Quant. anal. of diffusion along fiber tracts | Year 5 | Completed |

Planned modifications to the proposed timeline:

| Aim | Milestone | Modification |
|-----|-----------|--------------|
| 1.2 | Develop medially-based shape representation | Remove |
| 2.4 | DTI Atlas Building (Years 2–4) | New |

## 1.5   Georgia Tech

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|-----|-----------|-----------------------------|--------|
| | ITK Implementation of PDEs | Year 2 | Completed |
| | Applications to Core 3 data | Year 4 | Results and ongoing |
| | New statistic models | Year 4 | Completed — preliminary results |

Planned modifications to the proposed timeline:

| Aim | Milestone | Modification |
|-----|-----------|--------------|
| | Shape analysis | New |

# 2   Core 2

## 2.1   GE

Need data.

## 2.2   Kitware

Need data.

## 2.3   Harvard — Brigham

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|-----|-----------|-----------------------------|--------|
| 1 | NAMIC builds of slicer | Years 2–5 | Complete — release of builds 2.5, 2.6 |
| 1 | Schizophrenia and DBP intefaces | Year 3—5 | Partially completed, ongoing |
| 2 | ITK Integration tools | Year 1—3 | Completed |
| 2 | SLIPIE integration | Year 2—4 | Completed |
| 2 | fMRI/DTI algorithm support | Year 2—5 | Completed DTI, Ongoing fMRI |
| 2 | New DBP algorithm support | Year 2—5 | Ongoing |
| 3 | Compatible build process | Year 1—3 | Completed |
| 3 | Dart Integration | Year 1—2 | Completed, upgrades ongoing |
| 3 | Test scripts for new code | Year 2—5 | Ongoing |

Planned modifications to the proposed timeline:
None.

## 2.4   UCLA

Need data.

## 2.5 UCSD

Year 1–3 milestones indicated in the proposal and status:

| Aim | Milestone | Proposed time of completion | Status |
|---|---|---|---|
| 1 | Grid computing—base | Year 1 | Completed |
| 1 | Grid enabled algorithms | Year 3 | Ongoing |
| 1 | Testing infrastructure | Year 4 | Initiated |
| 2 | Data grid — compatibility | Year 2 | Completed |
| 2 | Data grid — slicer access | Year 2 | In progress |
| 3 | Data mediation — deploy | Year 1 | Incomplete (modfication below) |

Planned modifications to the proposed timeline:

| Aim | Milestone | Modification |
|---|---|---|
| 3 | Data mediation | Delayed pending integration of databases into NAMIC infractructure |

# 3 Core 4

Need data.

# 4 Core 5

Need data.